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FRANK THILLY
Professor of Philosophy

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1

CONTRIBUTIONS TO A PSYCHOLOGICAL THEORY OF MUSIC



VOLUME I NUMBER 1

THE UNIVERSITY OF MISSOURI STUDIES

EDITED BY
FRANK THILLY
Professor of Philosophy

CONTRIBUTIONS TO A PSYCHOLOGICAL THEORY OF MUSIC

BΥ

MAX MEYER, PH. D.

Professor of Experimental Psychology

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UNIVERSITY OF MISSOURI
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CONTRIBUTIONS TO A PSYCHOLOGICAL THEORY OF MUSIC

INTRODUCTION

THAT musical theory, if it is to be regarded as a scientific theory, must be psychological, need hardly be emphasized. No theory of any department of aesthetics can be other than psychological; and musical theory is a department of aesthetics. Neither the physicist nor the physiologist can prove by physical or physiological laws, why we must enjoy certain combinations of tones. It is the psychologist's task to determine the aesthetic laws which describe the subjective as well as objective conditions of aesthetic enjoyment. That physical and physiological concepts are used in the formulation of these laws, is a matter of course. But the physical and physiological concepts cannot be the only constituents; psychological concepts must also enter into these laws. The aesthetic significance of the former consists only in their relation to psychological concepts.

Aestheticians have often overlooked this fact, particularly with respect to music. Some have tried to demonstrate that we must enjoy certain combinations of tones, because vibrating bodies produce overtones. Others have demonstrated the same proposition by means of physiological facts. Such methods, in aesthetics, are metaphysical, not scientific. The aesthetician's task is to determine that—not why—enjoyment of combinations of tones depends upon objective and subjective conditions, which may be—no one can tell a priori—psychological or partly psychological, partly physiological and partly physical.

I

Scientific progress does not always consist in adding new notions to the existing ones; it very often consists in destroying an old system and constructing a new one. Of course, no sensible person will break down an old system unless he can substitute something better. We must accept all common terms which can be psychologically justified. If it is necessary, we must modify them, we must more accurately define their meaning. However, we must reject all terms that possess a purely historical value, but which cannot be justified by psychological observation. On the other hand, we must introduce new terms whenever psychological facts demand them.

The most important group of musical facts is the one referred to by the scientific term "melody." Music may be without rhythm; we find such music, e. g., among Oriental peoples. Music may be without harmony; no one doubts this, except perhaps a few theorists whose theories rest upon the contrary assumption; but the street boy who whistles his favorite tune contradicts them. There can be no music without melody. The usage of language does not permit us to speak of music when there is nothing but a single invariable chord, or when there is nothing but a rhythm beaten on a drum. Therefore we should take up first the theory of melody. In books on musical theory, however, one finds only elaborate discussions of harmonies. Melody, the essential part of music, does not seem to exist for the theorist. This applies to musicians as well as to psychologists. The only exception in psychological literature is Th. Lipps,1 who tried to lay the foundations of a theory of melody, but was only partly successful. It is a common error in musical theory that the basis of all music is the so-called diatonic scale, represented by the numbers 24, 27, 30, 32, 36, 40, 45, 48. This view prevents the development of a scientific theory of music. Its adoption prevented Lipps from carrying his investigations farther. The same mistake prevented

¹ Psychologische Studier, Heidelberg, 1885.

Gurney (in his very good book, *The Power of Sound*) from solving the problem, and led him to the conclusion that it was "hopeless to think of penetrating music in detail," because he had found no way himself. This inability to reach positive results simply proves that he was on the wrong scent. Unable to explain the existence in music of those notes which have no theoretic existence in the diatonic scale, he attempted to explain them in a manner that has become quite common in recent years: he assumed that the place of such notes in a musical form, "relationship being in abeyance," was wholly due to "close propinquity."

The consequence of this theory would be that the tones corresponding to the numbers 10, 11, 12, 11, 10, would result in the formation of a melody, 10 and 12 being connected by relationship, 11 with either 10 and 12 by propinquity. Should the propinquity be not close enough, we might take the numbers 30, 31, 36, 31, 30. To listen to such a tune but once is enough to convince one of the absurdity of the theory. No melody can be formed by means of propinquity. No tone that appears in music is really without relationship. The fact that some one—without having sought for it—has not discovered any relationship between certain notes, does not prove that relationship is in abeyance.

Yet Gurney merely follows Helmholtz here, and Helmholtz has not found any relationship for tones which—though they appear in music—have no theoretic existence in the diatonic scale.¹ He says:² "It is nothing but a step intercalated between two tones, which has no relation to the scale, and only serves to render its discontinuous progression more like the gliding motion of natural speech, or weeping or howling." Now, I have not the least doubt that Helmholtz would gladly have relinquished the pleasure of hearing music "like the gliding motion of natural

^{1&}quot;Accidentals" these tones are called by the theorists. But in a real work of art there is nothing accidental.

² Sensations of Tone, Ellis's translation, 2d ed., p. 352 b.

speech, or weeping, or howling." That is the music of cats at midnight, not the music of mankind.

Stumpf's most recent publication on *Consonance and Dissonance* ¹ shows that he believes in the dogma of the diatonic scale as firmly as anyone else.

My investigations have led me to the conclusion that one of the chief errors in musical theory is the a priori exclusion of the number 7. Herzogenberg,2 it is true, tried to introduce the number 7 into the theory of music. But he obviously put it into the wrong place. Some years ago my investigations led me to conclude that the number 7 plays a part in music. I afterwards discovered in the English translation of Helmholtz's Tonempfindungen, that similar conclusions had been reached half a century before by H. W. Poole,3 then an organ builder in Worcester, Mass. In the first two German editions of the Tonempfindungen Poole is not mentioned at all, in the third he is mentioned only as the inventor of a new keyboard, not as the author of a musical theory. It was left to Ellis to call attention to Poole's theory in his translation of the Tonempfindungen, although he did not accept it as true. However imperfect and inconsistent Poole's theory, as stated in his paper, may appear, he deserves the credit of having been the first to discover one of the most serious obstacles to the progress of musical theory. He seems to me to have made a mistake in so far as he attempted to introduce his immature theory into musical practice and spent his time in inventing new keyboards, which are very interesting indeed, but of little value in improving or developing the theory.

The so-called diatonic scale, which is the basis of all discussions in Helmholtz's *Tonempfindungen*, was introduced into the

¹ Beiträge zur Akustik und Musikwissenschaft, 1.

² Vierteljahrsschrift für Musikwissenschaft, vol. 10, pp. 133-145.

^{*}Silliman's American Journal of Arts and Sciences, 1850, vol. 9, pp. 68-83, 199-216.

modern theory of music by Zarlino in 1558. It was accepted by Rameau in his Traité de l'harmonie, 1721. According to Rameau (and Helmholtz) no numbers play any part in music but 2, 3, and 5. This is certainly not a law derived inductively from observed facts, but a dogma, for the number 7 has a similar psychological effect to the numbers, 2, 3, and 5, whereas this is not the case with other prime numbers, as 11, 13, etc. Rameau constructed the scale in the following way. He started from a certain pitch, called tonic, to which, in the scale, he attributed the number 24. Now, because the tones of the intervals 2:3 and 3:4, besides the octave 1:2, have the closest relationship, he added to 24 the numbers 32 and 36, 24:36=2:3, 24:32=3:4. We shall see later that his mistake consisted in making harmony the starting point of his investigation, without noticing that in melody the form of succession, the way in which the tones follow each other, is a factor of the greatest importance. If Rameau had considered this, he would have found that the tonic of a melody can never be represented by the number 24, which contains 3. The same error has, so far as I know, entered into all theories down to this time. Even Poole, although he discovered the possibility of using the number 7 in melody, did not see that it is simply impossible to represent the tonic by a number containing 3, because he, too, made harmony the starting point. He stated that the old theory was right in many cases, whereas there is really not a single case in which the theory (representing a tonic by 3) cannot be demonstrated to be wrong.

We saw that Rameau concluded that the numbers 24, 32, and 36 were the most important in the scale. Now, since 24:30:36 and 32:40:48 and 36:45:54 each represent the chord 4:5:6, he constructed his complete scale with these numbers, using instead of 54 the half 27; i. e., 24, 27, 30, 32, 36, 40, 45, 48. From

¹Rameau's "explanation" of the aesthetic effect of the relation of pitches by the mere physical fact, that sounding bodies usually produce,

this scale he derived another scale for the so-called music in "minor" by beginning with 40 and multiplying the first numbers of the "major" scale by 2; i. e., 40, 45, 48, 54, 60, 64, 72, 80. But neither Rameau, nor Zarlino before him, nor Helmholtz and his followers after him, have thought it necessary to tell their readers what facts observable in melody justified the use of this series of numbers as the basis of a theory of music in general—of melody as well as of harmony. We shall, in the following, make melody our starting point, because melody is the only essential of music.

Comparing different melodies with the so-called diatonic scale, we notice that some melodies contain fewer, others more notes than this scale. How do these facts agree with the theory that the diatonic scale is the basis of all music? To this question Helmholtz answers: In the first case, the composer has not made use of every possible note, in the second, he has added some notes in order to render the music more like howling. The only answer I know is this: To base any music theoretically on the diatonic scale is mere fancy.

For a long time the tempered scale of twelve equal intervals within the octave has been used in music. Rameau, who recommends this scale for practical purposes, claims that any interval of two successive notes in real music, equal to three-twelfths of the octave, $e.\ g.,\ g-a\#$ on the piano, has to be regarded theoretically as the interval 5:6; any interval of two successive notes equal to four-twelfths, $e.\ g.,\ a-c\#$ on the piano, as the interval 4:5, etc., although there are slight differences. The result of this assumption is the theory that music is made up of intervals, $i.\ e.$, that the intervals between the notes immediately following each other are the essentials of music, causing the aesthetic effect. This theory

not a single pitch, but several simultaneously (partial tones), does not concern us here any more than Helmholtz's "explanation" of the same effect by "identical partial tones:" I. because these explanations do not explain anything, but contradict almost more facts than they confirm; 2. because our task in the present paper is only to describe observable facts by laws, not to deal with hypotheses.

is supported even by Helmholtz, although it obviously contradicts his theory of the diatonic scale and his doctrine of what he calls "just intonation." An example of this theory of intervals is to be found in Helmholtz's statement that the aesthetic beauty of a melody depends on the number of Thirds and Sixths which it contains, a statement without any foundation, as Gurney has demonstrated. We shall see that the relative pitches do indeed cause the aesthetic effect, but not only the intervals of every two immediately following pitches.

There can be no doubt that the tempered scale cannot be made the basis of a theory of music, that theoretic conclusions based upon the intervals of the tempered scale have no scientific foundation. A scientific theory of music can only be a theory describing the laws of music performed in just intonation.

¹ Power of Sound, p. 148.

CHAPTER I

The Aesthetic Laws of Melodies Containing only Two Different Notes

When we hear successively two tones, the vibration rates of which have the ratio 2:3, or briefly speaking, the tones 2 and 3, we notice something not describable, which I shall call the relationship of these tones. To understand what is meant hereby, let the reader listen to the successive tones 7 and II or II and IO. He will notice that the two tones have no relation at all to each other. We may describe these facts in still another way, saying that in the first case (2-3) the two 2 tones form a melody, whereas in the other case (7-II) they do not. This expression means the same thing, although different words are used.

Besides the relationship, the hearer will observe in the case of 2 and 3 something else, namely, that after hearing 2 and then 3, he wishes to go back to 2, i. e., to hear 2 once more. On the other hand, when we hear first 3 and then 2, we do not wish to hear 3 once more. If 3 and 2 are repeated several times in order to prolong the melody consisting of these tones, we are satisfied in the case where the melody ends with 2, dissatisfied in the case where the melody ends with 3. Save in a few instances, where a peculiar psychological effect is aimed at, no melody that contains 2 can end

¹ In the following I shall try to describe the facts in language as plain as possible, avoiding all flowery, but meaningless phrases, so common in musical aesthetics, and all the barbarous terms of the ancient and mediaeval and even modern theorists, which are a mere burden to the memory, and have no scientific value whatever.

² For the sake of simplicity let us first consider melodies of two different notes only.

with any tone but 2. In the case of the tones 3 and 4, the melody must end with 4, not with 3; in the case of 4 and 5, with 4; 5 and 8, with 8; 7 and 8, with 8; 4 and 9, with 4; 15 and 16, with 16; i. e., the general law is: When one of two related tones is a pure power of 2, we wish to have this tone at the end of our succession of related tones, our melody.

When we hear a melody made up of the successive tones 3 and 5, or 5 and 7, we observe a *relationship* similar to that of the cases above, but we notice that it does *not* make any difference whether we hear, $e.\ g.$, 3 first and then 5, or 5 first and then 3. In neither case do we wish to hear the first tone once more; or rather, in case we do, the wish is not caused by the particular relationship of these tones. This psychological effect is indeed restricted to the powers of 2 (including $I=2^0$).

That no relationship at all is to be observed between tones represented by the prime numbers 11, 13, 17, 19, etc., leads to the conclusion that only tones represented by the prime numbers 1, 2, 3, 5, 7 and their composites possess that psychological property. That the number 7 cannot be excluded in the case of two different notes, does not, of course, decide whether it can be excluded in the case of more complicated melodies—as in real music. This question can be answered by observation only. So much is certain, however: there is no reason for excluding the number 7 from the theory of music on a priori grounds. We shall see later that there are comparatively few melodies which do not contain the number 7.

¹Lipps (Psychologische Studien, Heidelberg, 1885), who describes these facts in a similar, although not in the same way, has tried to explain them by the hypothesis that any sensation of tone is not really a continuous sensation, but a series of short sensations interrupted by short empty times. These single short sensations, each corresponding to one single vibration, are to be observed, according to Lipps, only in the case of very low tones. I have shown in my paper, "Ueber die Rauhigkeit tiefer Töne" (Zeitschrift fur Psychologie, 13, p. 75), that there is not the slightest foundation for such a hypothesis. Doubtless, the future progress of the physiology of the nervous system will help us to explain the facts above stated.

The relationship which we observe is closer in some cases than in others; e. g., very close between the tones represented by the numbers 1 and 2, or 3 and 8, less close between the tones 3 and 5, or 5 and 7, or 15 and 16. I have tried to bring the different relationships into a series. It seems to me that the order of relationship within one octave is the following: 1-2, 2-3, 4-5, 5-6, 4-7, 6-7, 8-9, 15-16, 5-7, 5-9. Whether there is a slight degree of relationship in the cases of 7-9 and 14-15, or no relationship at all, I was for some time unable to decide. It now seems to me that a succession of the two tones 7 and 9, or 14 and 15, does not sound melodious, i. e., that there is no relationship in these cases, and I shall in the following assume that there is none. Transpositions by octaves do not, according to my observations, cause any difference, so that the relationship of 1-3 is of the same degree as that of 2-3, or 3-4. The relationship of 3-5 is of the same degree as that of 5-6, etc. We may therefore represent the relationship in all intervals of the ratios 2:3, 4:3, 1:6, 8:3, etc., by the one symbol 2-3; i. e., in any number composed of a power of 2 and a coefficient we omit the power of 2 and use simply the coefficient, and instead of any pure power of 2 (including 1=20) we use simply 2.1 We may then substitute for the above series of relationships the following series of symbols representing the relationships without limitation as to distance of pitch: 2-2,2-3,2-5,3-5,2-7,3-7,2-9,2-15,5-7, 5-9. I do not assert that this series represents a quite accurate order of the relationships. It is in certain cases theoretically important to know whether a certain ratio represents closer relationship than another one. Yet it is often difficult to decide this question. For example, I do not feel able to decide which of the two ratios

¹I ask the reader, if he wishes to understand my theory, to bear in mind that according to this numeration 9:3 is identical with 3:2, although arithmetically 9:3=3:1. But in my theory it is necessary to regard 1 as a power of 2 and to represent 1—as all powers of 2—by the number 2. Similarly, 75:15 (which in absolute numbers may represent, e. g., 150:240 or 75:30) is identical with 5:2.

3-7 and 2-9 represents the closer relationship. However, it is comparatively easy to arrange the ten ratios in three such groups as to leave no doubt concerning the closer or more remote relationship of a member of one group, when compared with any member of another group. I shall denote—whenever this is desirable—the ratios of the second degree of relationship by simple parentheses, the ratios of the third degree by double parentheses, in this way: 2-2, 2-3, 2-5, 3-5, (2-7), (3-7), (2-9), ((2-15)), ((5-7)), ((5-9)). The reader, most probably, will agree with me concerning the utility of this grouping. We may speak, then, of the first, second, and third degree of relationship, without meaning, however, that there are no differences within each group. I will emphasize, further, that when I speak of the *relationship* of two successive tones, the order of succession of the two tones in the melody is not regarded at all.

Similarly, we observe in those cases where one of the two tones is represented by a pure power of 2, that our wish to have this tone at the end of the melody is much stronger in some cases than in others; e. g. very strong in tones represented by the numbers 3 and 2, or 3 and 4, or 5 and 4, less strong in tones represented by the numbers 7 and 8, or 9 and 8. This seems to depend upon the degree of relationship of the tones.

One question of this kind we may still consider, namely, whether in the case of the octave, where the tones are represented by the numbers I and 2, the psychological effect of the melody's being closed by I, is different from that when the melody is closed by 2. Lipps 1 asserts that of the two tones I and 2, we prefer to

¹ Psychologische Studien, p. 132: "In jedem Ton ist der Rhythmus seiner tieferen Octave, nicht der der höheren, vollständig enthalten. Ist ein Ton gegeben, so bedarf es zum Vollzug der Empfindung eines nachfolgenden um eine Octave höheren Tones noch der selbständigen Zweitheilung des durch den gegebenen Ton vorgezeichneten Rhythmus. Diese Zweitheilung ist, wie oben gesagt, die einfachste rhythmische Leistung. Immerhin ist sie eine Leistung. Dagegen wird unserem Empfindungsvermögen gar nichts rhythmisch Neues zugemuthet, wenn die tiefere Octave folgt. Darnach muss der Octavenschritt von oben nach unten in geringerem Grade

have I at the end of the melody. I could not convince myself of the truth of Lipps's assertion, and I am inclined to believe that he was deceived when he made this observation, by having in mind at the same time a certain complicated melody which contains two tonics, but closes on the tonic below. I have to confess that, if I exclude all psychological effects of tones other than I and 2, I cannot detect any difference, whether I is at the end or 2. This justifies my regarding I simply as a power of 2.

I mentioned above that no melody can be formed by means of propinquity alone, that the result would be a howling, but not a melody. This does not mean, however, that more or less propinquity of related tones is perfectly indifferent. Observation teaches us that we have a decided preference for the *smallest* of all those intervals which possess a certain relationship. *E. g.*, of all intervals which possess the relationship 2-3 we greatly prefer the interval of the ratio 3-4 (the "Fourth") for constructing a melody of two tones. The aesthetic importance of this fact in *complex* melodies will soon be seen.

als der Fortschritt zu etwas Neuem erscheinen und in höherem Grade den Eindruck des sich in sich Beruhigenden, also endgültig Abschliessenden machen, als der von unten nach oben. Dass es in Wirklichkeit so ist, kann nicht bezweifelt werden." I regret that from my own observations I am compelled to doubt this.

CHAPTER II

THE COMPLETE MUSICAL SCALE

The complete musical scale is the series of all tones which may occur in one melody, however complex this may be. As soon as we know the aesthetic laws of melodies which contain only two different notes, it is very easy to construct this scale. Suppose a melody begins with the tone 5, followed by 3. Now, we know that if it results in a melody at all, the tone 3 can be followed only by a tone that is related either to 3 or perhaps to 5 or, if not related to either 3 or 5, perhaps to another tone that is itself related to either 3 or 5. It is impossible, therefore, that the third tone in this melody should be, e. g., 19 or 33, because neither 19 nor 33 fulfils any of these three conditions. So the third tone can only be a product of powers of 2, 3, 5, and 7, since the numbers (2, 3, 5, 7, 9, and 15) representing the melodic relationships contain no other prime numbers than 2, 3, 5, and 7. The third tone may be, e. g., 45, which is related to 5 as well as to 3; or 75, which is related to 5; or 135, if this is followed, e. g., by 9, which is related to 135 as well as to 3 and 5. Generally speaking, since relationship of successive tones is observed only in the cases where the tones are represented by products of 2, 3, 5, and 7, we have to draw the conclusion that a complete musical scale cannot contain any numbers except powers of 2, 3, 5, and 7, and their products. Still, whereas in the case of only two different notes the numbers representing possible tones are-according to observation-restricted to the numbers of certain ratios enumerated in the above series of relationships, there can of course be no restriction if the melody can contain an unlimited number of different notes. I. e., the complete

musical scale is represented by the infinite series of all products of the powers of 2, 3, 5, and 7. We find the beginning of this series in the table.

COMPLETE MUSICAL SCALE

XII	1015.9	3 ² 7 5 ³	1024 1008 1000	512 504 500	256 252 250	128 126 125	64 63	32	16	8	4	2 2 12. E. S. 63 11.73 125 11.58
ΧI	958.9	3 ⁵ 3 5 3 ³ 5 7	972 960 945	486 480	243 240	120	60	30	15			243 11.10 15 10.88 945 10.61
Х	905.1	3 ² 5 ²	900	450 448	225 224	112	56	28	14	7	1	225 9.76 7 9.69
IX	854.3	3 ³ 3 5 7	864	432 420	216 210	108 105	54	27				27 9.06 105 8.57
VIII	806.4	3 5 5 ²	810 800	405 400	200	100	50	25				405 7.94 25 7.72
VII	761.1	3 3 ³ 7 3 5 ³	768 756 750	384 378 375	192 189	96	48	24	12	6	3	3 7.02 189 6.75 375 6.60
VI	718.4	3 ⁶ ·· ·· 3 ² 5 ·· · · 5 ² 7	729 720 700	360 350	180 175	90	45					729 6.12 45 5.90 175 5.41
٧	678.1	3° 5° 3 7	675 672	336	168	84	42	21				675 4.78 21 4.71
IV	640.0	3° 5 3° 5 7	648 640 630	324 320 315	162 160	81 80	40	20	10	5		81 4.08 5 3.86 315 3.59
111	604.1	3 5 ²	600	300	150	75			-		-	75 2.74
11	570.2	3° 3° 7 5 7	576 567 560	288	144	72 70	36	18	9			9 2.04 567 1.77 35 1.55
ı	538.2	3° 5 3 5° 7	540 525	270	135							135 0.92 525 0.43

Actually, of course, no music will ever make use of an *infinite* number of different notes, if for no other reason than that the life of a man would be too short for such a performance. We need not, therefore, continue the series farther than actually existing music requires. I have found the series to suffice when continued up to 1024. Besides, in the table, I have omitted of 5 all higher powers than 5³, and of 7 all higher powers than 7 itself, because I have found no case where these omitted powers of 5 and 7 are used. This is interesting when compared with the fact that of 3

much higher powers are used, and that $9 = 3^2$ appears even in ratios representing direct relationship, and that of 2 all the powers are of absolutely equal value with respect to relationship.

Should the reader think it necessary to add the omitted products of powers of 3, 5, and 7, he is of course free to do so. Whether they are ever used can be decided only by experimenting upon special pieces of music—inductively, not deductively. Further, it may not be true that the series in the table goes far enough to permit the actual representation of all existing melodies. In this case it is easy to continue the series. Whoever desires to have the series continued further, may do this for himself, until either his paper, his ink, or his time fails him. But no one should tell me that I have no right to call the scale "complete," because, on paper, it is not infinite. We do not deny, e. g., the mathematician's right to call a certain curve he has drawn a "parabola," although the curve on the paper is not infinitely extended, as a theoretical parabola is.

In order to represent the different relationships of two successive tones in a manner as simple as possible, I omitted the power of 2 in numbers composed of a power of 2 and a coefficient, and used simply the coefficient; and instead of any pure power of 2 I used simply 2. This is justified by the fact that transposition of one of the tones by octaves does not alter the relationship. In the same manner I shall omit in actual representation of music all powers of 2 contained in the numbers of the table. The numbers which I shall use, accordingly, as representatives of all numbers of each line in the table, are found in the second column from the right.

One notices at a glance that the ratio 3:4 occurs very often indeed among the numbers of the table. I mention this, because in a criticism of my theory I find the curious statement made that notes which constitute with other notes the interval represented by the ratio 3:4 are outlawed by my theory. As a matter of fact, the numbers 729:243:81:27:9:3:2, all of which are to be found in the "Complete Scale," represent a series of the ratio 3:2, wherein

3 and 2 signify, in my notation, any number that may be derived, respectively, from 3 or 2 by multiplying with any pure power of 2. Consequently the above series of the ratio 3:2 represents, among others, a series of the ratio of 3:4. I have given my system of numbers the name of a complete scale for the simple reason that there is no melodious combination of tones that is not represented within the infinite series of the Complete Scale. Besides, my critic's remark that some notes are outlawed by my theory loses sight of the fact that my theory is not a deductive theory, prescribing what should be, but an inductive theory, simply describing what has been observed.

The numbers of the table, which of course represent relative pitch, may be brought into connection with an absolute pitch by arbitrarily defining the absolute pitch of any one of them. If we substitute tempered intonation for the intonation theoretically required, each tempered tone (designated in the table by a Roman numeral) takes the place of several tones in perfect intonation. In order to show the magnitude of the difference between tempered and perfect intonation in vibrations, I have added to the Roman numerals the tempered vibration rates, making 640 identical in tempered and perfect intonation. Further, at the suggestion of Mr. Wead, of Washington, D. C., I have added to each tone of the Complete Scale the value which determines its distance from any other tone in units of equally tempered semitones (E. S.). We find, e. g., that the interval between 21 and 5 is equal to 4.71-3.86 = 0.85 E. S. The interval between 3 and 5 is equal to 7.02-3.86=3.16 E. S. The interval between 9 and 15 is identical with this; the difference is 14.04—10.88=3.16. In the latter case we have to add 12 E. S. to 2.04, which represents 9. The addition of these values to the table increases its usefulness considerably.

The Complete Scale may be used in order to determine exactly the relative pitches which the composer *meant* in a certain melody. The common musical notation, because of its historical develop-

ment, does not give the pitches exactly, but approximately. In order to determine the pitches meant by the composer, we must have an instrument that gives all possible pitches, so that we can choose between them. The organs which have hitherto been built by Helmholtz and others in order to compare Helmholtz's "just intonation" with "tempered" intonation, cannot serve our purpose, because they do not contain all possible pitches, as represented in our table of the complete scale. While at Clark University I constructed a reed organ that gives exactly the pitches of the highest four octaves (64-1024) in the table. The absolute pitch of this organ was arbitrarily chosen and is identical with the numbers in the table representing the relative pitches, so that the lowest reed gives 64 (complete) vibrations in a second. The organ does not possess any technical properties that make a detailed description of its construction desirable. The only important question, how to tune the reeds, is easily answered by any expert in physiological acoustics or any professional tuner. I selected a reed instrument for two reasons: I. It is extremely easy to tune reeds, in the simple ratios here required, with an accuracy that satisfies the highest demands. 2. Reeds may be voiced so that their quality most closely resembles that of the tones of stringed instruments of the viol class, with which musical persons are well familiar.

When we have to determine the right intonation of a certain melody, we first note down the melody in intervals of twelfths of an octave, *i. e.*, in units of the equally tempered scale. Now our table of the Complete Scale (and our organ) not only permits several slightly different intonations for each note of the tempered scale, but even leaves it absolutely open with which tone of the Complete Scale to begin. Consequently we begin with any one of those tones which appear to possess a higher probability; for experience very soon teaches us that we are rarely successful when we begin with a very complex number. We do not, therefore, begin with 729 or 675, but with 5, 3, or 15, or other rather simple numbers. Now, beginning with a certain tone of

our instrument, we play one of those combinations of tones which are *objectively possible* according to our notation in intervals of "twelfths" and according to our Complete Scale. The result may be that all the combinations we try appear so utterly repugnant that we are subjectively convinced that no Bach or Mozart or Beethoven or Wagner could have aesthetically enjoyed them. In such a case, we begin with another tone and try those combinations of tones which are now possible, until we have succeeded in determining an intonation of the whole melody that appears satisfactory.

Usually one finds only one intonation of the whole melody which he feels inclined to attribute to the genius of a great composer. All other intonations, when compared with this one, appear devoid of beauty, i. e., of aesthetic effect, and are therefore rejected. However, in some cases one notices that two different intonations of the whole melody surpass all others in aesthetic effect. Then, of course, we have to accept them both, at least temporarily, as long as there are no particular reasons for attributing the one or the other intonation to a special composer. I have never met with cases where a great many different intonations of a whole melody appear aesthetically effective. The expression "different intonations of the whole melody" may be misunderstood. Let me say, therefore, that I mean by this two (or more) intonations of the same ("the same" in intervals of twelfths) melody which are not perfectly identical, however great or small the differences may be.

Of course, the reeds in such experiments have to be voiced carefully, lest the observer should form a wrong judgment through peculiarities of the quality of certain reeds. Besides, one must be aware of the tendency to deviate a little from the numerically right intonation, the cause of which has not yet been made quite clear.

¹C. Stumpf and M. Meyer, Maassbestimmungen über die Reinheit consonanter Intervalle. Zeitschrift für Psychologie, XVIII, pp. 321-404; and Stumpf's Beiträge zur Akustik und Musikwissenschaft, Heit 2.

Such a tendency, however, is not likely to have affected my observations, because the smallest differences of pitch in the Complete Scale are considerably greater than the average error caused by that tendency.

In Chapter III we shall determine the intonation of some common melodies. I shall transpose some of them in certain ways, without regard to the notation (the "key") originally used by the composer. This transposition causes only a difference in the absolute pitch of the melody, a difference which does not at all concern us here. The reader will see at once that this transposition enables us to use in any example the same *musical name* for the same *number* representing the relative pitch. This is by no means necessary, however; it would even be misleading should it give rise to the view that a definite *absolute* pitch belongs to each number. I do not expect, therefore, to be consistent in this transposition.

CHAPTER III

Analysis of Complex Melodies

We are now sufficiently prepared to pass on to the analysis of complex melodies. By "complex melodies" I mean melodies which contain tones not related to each other, or, better, tones related to each other not directly, but by mediation of a third tone, so that, as we shall see, the melody must theoretically be dissolved into partial melodies. We shall analyze a number of well-known melodies and derive from them inductively the laws of construction of complex melodies. Before the theoretical analysis of complex melodies, however, I shall give in musical notation, with the theoretically corresponding numbers, an example of a simple melody, i. e., a melody every tone of which is related to every other tone. Our example is taken from Beethoven's Fidelio.

1. BEETHOVEN, FIDELIO

Above the notes are set the theoretically corresponding numbers. According to my method of numeration two different pitches are represented by the one number 2. These pitches represented by the number 2 I shall call "tonics." So our melody starts with a tonic and passes to 3, 1 a movement which causes a strong wish to go back to a tonic. This wish is not granted, but the melody passes to a closely related tone 5, which strengthens the wish to go to a tonic 2. The melody then, indeed, goes over to 2, but only in order to leave it again and to pass through 5, which causes a rather strong wish to go to a tonic, to 3, which causes a

¹To this pitch 3 I do not give any name, least of all the name "dominant," because such a name cannot be scientifically justified.

very strong wish to go to a tonic. However, this wish is not gratified. The melody passes again to 5, back to 3, and now to 2. But



2 is left again for a short time and replaced by 3, whence the melody finally surrenders to 2. This last movement over 3 back to 2 is repeated twice. 2 has won the battle, and the hearer is aesthetically satisfied.

Such a simple melody as the above is not often used in music. It serves, because of its simplicity, very well as a signal, for which, indeed, it is used in Beethoven's opera. A complex melody is the following tune of Silcher to Uhland's poem, *Der gute Kamerad*.

2. SILCHER, DER GUTE KAMERAD

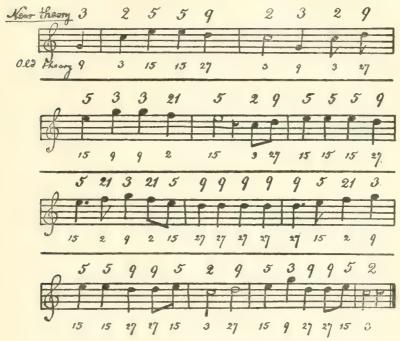
The melody starts with 3. The hearer of course—granted that the melody is unknown to him—can not guess whether the pitch heard is a tonic or not. From 3 the melody passes to 2. Now the hearer wishes to remain on this pitch. But the melody passes to 5 and from there to 9, which is related to 5 and 2, although not very closely. From 5 as well as from 9, more strongly from the former, less from the latter, the hearer wishes to go to 2. This wish is granted, but after some time has passed, 2 is left again and is replaced by 3. For a short moment the melody passes back to 2 and thence to 9; from 9 not back to 2, but to the related tone

¹ I hope that no one will raise the objection that the hearer will probably suppose the melody to be yet unfinished and so will certainly wish to hear the rest.

5, and from 5 to the related tone 3. Although 3 is not 2, some rest on 3 causes the hearer a certain amount of satisfaction, because the 9, which he has met several times, is to 3 as 3:2 (according to my numeration). A tone like 3 in this case I call a secondary tonic. From 3 the melody passes to 21, which is to 3 as 7:2 (i. e., 3 appears as a secondary tonic), so that the hearer wishes to go back to 3. Instead of such a movement the melody passes to 5, which is closely related to 3, but not at all to 21. We shall see that this is very common in music, viz., that the melody instead of passing to a pitch to which the hearer expects it to pass, passes to another pitch, but to one closely related to the expected pitch. Now, with 5 the melody can not end, because the tonic 2 has been heard already, and in such a case the hearer expects the melody to end with a tonic; otherwise he would not be aesthetically satisfied. After a series of further movements the melody indeed ends with 2.

We may simplify this melody by reducing it to the relative pitches of the above melody of Beethoven, 2, 3, and 5. The first part of Silcher's melody is then represented by the numbers 3, 2. 5, 2, 3, 2, 5, 3, 5, forming by themselves an unfinished melody. From the remaining pitches combined with 3 we get the following melody: 3, 9, 3, 9, 3, 21, 3. Why I have added to the remaining pitches the last 3 will be seen at once. If we divide each number by 3, we get 2, 3, 2, 3, 2, 7, 2, a complete melody with tonics, ending with a tonic (which in the compound melody I call a secondary tonic). This second melody is interwoven with the first one, 3 in both cases being of identical pitch. We have to lay stress on the word "interwoven," because in books on musical aesthetics the impression is often made on one that a melody is always composed of smaller parts by simply filing them together. The psychological laws of relationship are, of course, valid even when the related tones are separated by other tones; though the psychological effect of the relationship becomes weaker and weaker as the time interval between the two related tones increases.

The possible ways of combining melodies such as those above, are of course almost infinite in number, and we cannot dis-



cuss all possibilities here. One point only I shall mention. I added to the second partial melody the last 3 in order that this melody should end with its tonic. In the compound melody it is not necessary that this last pitch should really be heard; it may be replaced by a closely related pitch (5), which must be a pitch of another partial melody (in our example: of the partial melody which carries the tonic of the whole.) Similar instances are innumerable in music. We shall see that there is a general law, that the last tone of a partial melody may be left out, if it can be replaced by a tone closely related to the omitted tone. This, however, is but a special case of the more general law mentioned on page 22.

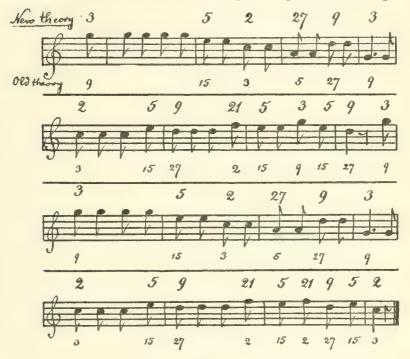
Below the notes in our second example, are to be found the numbers which represent the same melody according to the old theory (Zarlino-Rameau-Helmholtz). Yet here also the powers of 2 are omitted, in order to make the numbers more easily comparable. We notice that in the old theory a pitch is represented by 2, which is no tonic, but may even be left out entirely without changing greatly the character of the whole. But the tonic itself is represented by 3, and the melody ends with 3. According to that theory we have not several partial melodies, one interwoven in a highly artistic way with another; but we have simply a number of pitches, arbitrarily taken from a "scale" and combined not into a melody, of course, but into a succession of pitches, in the same manner as a bricklayer builds a wall out of bricks: here it is quite indifferent whether he takes first the one and then the other; or the reverse. I say "not into a melody," because the most elementary psychological law of melodious succession is simply neglected by that theory, viz., the law, that no hearer is satisfied, if after having heard once or more often the tonic 2 he does not find 2 finally at the end of the melody.

When we compare the numbers of the new theory with those of the old one, we see that in the new theory the value of most of the numbers is one-third of that of the numbers of the old theory. In order to compare the intonation corresponding to the numbers of one theory, with the intonation corresponding to the numbers of the other, we may multiply all numbers of the new theory by 3. Then—in our second example—the numbers of both theories are identical, except in the case of f, which in the new theory is represented by 63, in the old theory by 64. Now, it is easy to make the experiment of playing the same melody with 63 (according to the new theory) and again with 64 (according to the old theory). In the first case the melody sounds all right. In the second case the hearer has an impression similar to that experienced when he looks at a painting totally misdrawn. As soon as one hears 2 (64) he expects this to be a tonic, but his wish to have the melody end with this tone or an octave of it, will never be satisfied. The succession of pitches does not end on the note that appeared by its

intonation to be a tonic, but on another one. And this is called "just intonation" by Helmholtz and his followers.1

3. BEETHOVEN, DAS BLÜMCHEN WUNDERHOLD

The above tune of Beethoven begins with 3, 5, 2. Then follows 27, which has no relation to the preceding tonic 2, although

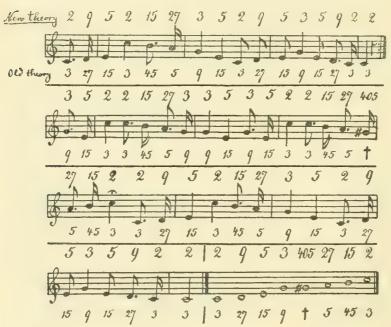


¹ Lipps (Psychologische Studien, p. 135) has gone still further and pretends to have derived from this "just intonation" a general psychological law of melody, viz., the law that the tone 3 becomes in a higher degree the real aim of the movement, because it is preceded by 2. This would be like saying of Napoleon: "Elba" became in a higher degree his real aim, because he had previously been Emperor. In order to support his theory Lipps cannot bring forward any argument but the following: "Wenn zwei sich streiten, freut sich der Dritte." I am unable to see how this proverb applies here, since a struggle of sensations of tone has never been observed. Instead of deriving from a supposition such a strange theory, it would be better to give up the supposition and conclude that the Helmholtzian intonation is not a just one.

it does have to 3, the first note of the whole melody. This 27 following 2 is an enigma to the hearer, because of the lack of relationship. The solution is given at once by 9 and 3, which form a melody with 27 (3 being a secondary tonic) and which at the same time are closely related to the preceding melody 3, 5, 2. A detailed description of the following parts is scarcely necessary. The reader will find in them musical forms similar to those in the previous examples; similar forms, but not exactly the same, for even such a small number of different pitches allows an almost infinite number of melodious combinations.

4. IRISH FOLK SONG

The above melody may be easily analyzed by the reader, except that part where g# occurs. Our table shows for g# the numbers 25 and 405. We may play the melody with either of these tones, but we have a decided preference for 405. With the



succession of the tones 2, 15, 27, 405, 27, 15, 2 the melody obtains quite a peculiar color. From the first mentioned 2 the melody passes to the related tone 15, so that the hearer wishes to return to 2. The melody does not return, but passes from 15 to the related tone 27 (15:27=5:9), i. e., to a tone that has no relation to the expected tone. Moreover, on 27 as a secondary tonic is based the partial melody 27, 405, 27 (separately 2, 15, 2), of which tones none has a relation to 2. The psychological effect of all this is similar to that of a dangerous situation from which one sees no escape. Yet very soon relief appears. From 27 the melody passes back again to the related tone 15, whence it returns to the tonic 2.

The melody is followed by the series of tones in musical notation of which it consists. The cross below g# means here, as in all cases where it occurs in the following, that the corresponding pitch—according to the old theory—has no relation to the melody, but "only serves to render the melody more like howling." A further proof of the worthlessness of that theory is to be found in the fact that this note—as we saw above—has a certain definite intonation, whereas a slight difference of intonation could not have any considerable effect, if the note were only to render the melody "more like howling."

A remarkable fact is that this melody contains no ?.

5. Mozart, Don Giovanni

In this case the melody begins with a tonic, but the first part (four bars) ends with 3. This in itself would not be at all remarkable, but the way in which the melody arrives at 3 shows that it originated in the mind of a master. From 2 the melody passes to 27, which has no relation to 2. This movement affects the hearer in the manner mentioned in our third example. After 27 we hear 9, which leads us nearer to the tonic. Now we might replace all the notes in the third bar by 9 and so pass directly from 9 to 3,

still nearer to the tonic. Here Mozart introduces the partial melody 15, 63, 9, 3 (not 15, 2, 9, 3, as the theory of the diatonic scale supposes), where 3 is a secondary tonic, so that this partial



melody may be separately represented by 5, 21, 3, 2. That the whole of the first four bars ends with the secondary tonic 3 of a partial melody, gives the hearer simultaneously some satisfaction and dissatisfaction: satisfaction, because of the partial melody ending with its tonic; dissatisfaction, because this part of the whole ends with a strongly accentuated tone that is not the tonic of the whole, but the tone 3, which causes a particularly strong wish to go to the tonic 2. Now only, is the final return to the tonic capable of producing the immense aesthetic effect of this melody of Mozart's. The old theory does not tell us anything of all this. According to that theory, the whole effect is caused simply by the pitches being taken from the diatonic scale. In that event it is difficult to understand why other melodies, the tones of which are also taken from that scale, are not just as beautiful.

6. BEETHOVEN, SONATA, OP. 14, No. 2

The first part 3, 3, 75, 5, 15, 2 of this melody ends with a tonic. It contains the partial melody 75, 5 (15, 2), with 5 as a secondary tonic. The second part is a partial melody (separately represented by the numbers 3, 3, 9, 75, 15, 2), based on 9 as a secondary tonic. This partial melody itself has to be analyzed again, the melody 675, 135 (separately 5, 2) being a partial melody with 135 as a secondary tonic. The old theory represents the second part of Beethoven's melody by 5, 5, 15, 2, †, 27.

In the third part the melody, passing through a number of smaller partial melodies, touches 2 several times and finally closes with 2. The last notes are 3, 21, 15, 2. There we may question why the 3 above the 2 has been used and not the 3 below the 2.



Some theorists have alleged that the mere movement of ascent and descent of the pitches, even without any relationship, is an important factor in the aesthetic effect of music. It is possible, indeed, that ascent and descent have a slight aesthetic effect. However, I have not observed this effect myself nor has any one else, and so I must regard it as unproved. What I have observed, is the following: Suppose the composer intends to form a melody of two different tones, one of which is absolutely given, e. g., 2 in a certain pitch, while the other is determined only by its number, e. g., 3, so that several pitches, differing by the interval of an octave, are possible. In such a case, unless there is some reason against it, that 3 is used which is nearest to the given 2, i. e., the 3 below. Yet when not only the 2 is given, but another tone also, e. g., the 5 just above the 2, and 3 (without determining pitch) has to be added, that 3 is added which is nearest to both given tones; i. e., the 3 above the 2 is added. When in this latter case the 3 below 2 is used, the melodious unity of the three tones 2, 5, and 3 is dissolved, and two partial melodies (composed of 2 and 3 and of 2 and 5), interwoven with each other, are the result. When the composer desires a complex form, he has to use in this case the 3 below, when he desires a simple form, the 3 above.

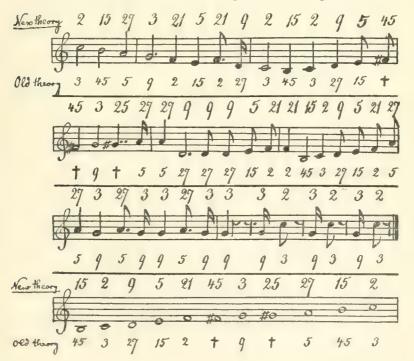
If Beethoven, at the end of the present melody, had used the 3 below the 2, the whole of the last four notes would act upon us as a combination of the two partial melodies 3, 15, 2, and 3, 21, 3, the latter interwoven with the former. But in the present form the last four notes act upon us as a combination of the partial melodies 3, 2, and 21, 15, 2, because 3 has been separated from 15 and 21 by the greater distance. The second partial melody, 21, 15, 2, in this case is again composed of two partial melodies, viz., 21, 15 (separately 7, 5), and 15, 2, so that, by this use of the 3 above, the whole form of these four notes has been changed.

Another case of this kind is the separation of the 21 from the preceding 9 in the third bar. The 21 forms a partial melody with the following 9 of the fourth bar.

Gurney says in his *Power of Sound*: "The ascent from the dominant to the tonic above, the descent to the tonic below, each seems right in its place, while in a form that was worth anything either would be resented as a substitute for the other." We have seen above that this fact is not so wonderful and beyond human understanding as Gurney assumes it to be. Of course, it is not impossible to exchange a 3 or any tone of another number for an octave of it; yet in some cases the melody ends better with a simpler, in others, with a more complex form.

7. BEETHOVEN, FOURTH SYMPHONY

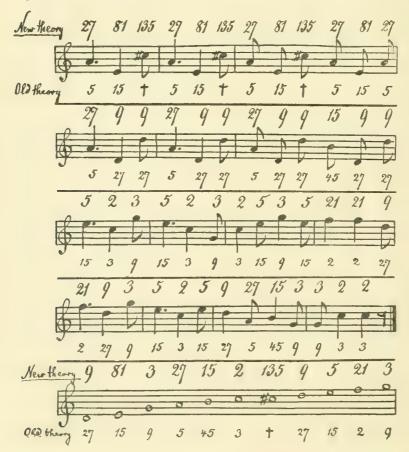
In this melody I wish to call the reader's attention to the melodious form 5, 45, 45, 3, 25 of the third and fourth bars, which, according to the old theory, would be nothing more than "howling." This form has to be regarded as composed of the



melodies 5, 45, 3, and 45, 25 (separately 9, 5). The following 27 is then connected with this form by the relation of 27 to 3. I have tried to find out whether in the case of g# 25 sounds better than 405, which would form a melody with the following 27 (separately the melody 15, 2). 25 appears to me to yield a better aesthetic effect than 405.

8. BEETHOVEN, SIXTH SYMPHONY

The first part of this melody is a partial melody (separately represented by the numbers 2, 3, 5, 2, 3, 5, 2, 3, 5, 2, 3, 5) with 27

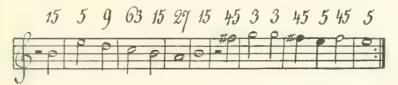


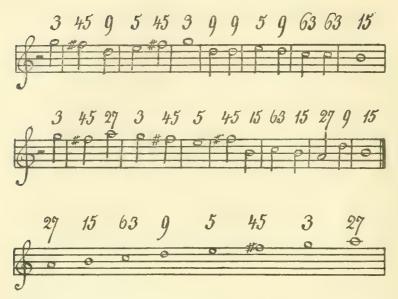
as a secondary tonic. The second part is a partial melody (separately 3, 2, 2, 3, 2, 2, 3, 2) with 9 as a secondary tonic, so that the movement from the first secondary tonic to the second is identical with a passage from 3 to 2. The next partial melody 9, 15, 9, o (separately 3, 5, 3, 3) is a melody without a tonic. From this we arrive at the last part, which contains the primary tonic 2. The first three bars of this part are composed very simply of 2, 3, and 5. Three times the melody touches 2; but when 2 is expected again for the fourth time, 21 is heard, which has no relation to 2. The psychological effect of such a movement has already been mentioned. Yet 21 is followed by 9, which is related to 21 as well as to 2. This melody of Beethoven's is an excellent means of convincing the reader of the truth of my theory. Let him play this melody in the intonation corresponding to the new theory and compare it with the same melody played in Helmholtz's "just intonation," which—when the hearer becomes aware of the intonation—destroys the whole aesthetic effect.

We shall now analyze a second, somewhat different class of melodies, viz., melodies without a tonic. Instances of such melodies have already been found in some partial melodies within the preceding examples. In this second class of music we find many instances of partial melodies containing a secondary tonic, but we do not find any primary tonic 2.

9. GERMAN CHORAL

In this melody there is no pure power of 2, i. e., no primary tonic according to our definition of a tonic. But there are secondary tonics. The melody has been harmonically treated by mu-





sicians as if 63 were a tonic (identified with 64). However, the aesthetic effect of the melody itself is for the most part destroyed by this, although I will not deny that many a hearer may be much pleased by the successions of harmonies offered by the composer instead of the melody.

10. WAGNER, LOHENGRIN

This well known melody from Wagner's Lohengrin is another example of a melody without a (primary) tonic. The melody ends with 25. The previous melody ends with 15. We shall find other melodies ending with still other numbers. There is no law that a melody without a tonic must inevitably end with a certain number, as in the case of a melody with a primary tonic (one tonic or more than one in different octaves), where the last note of the melody must be a tonic.

The last two bars of this melody form the partial melody 15, 45, 25 (separately 3, 9, 5), all these tones being mutually related.



How the old theory of the diatonic scale could explain these two bars, I am unable to conceive.

II. OLD GERMAN SONG

This melody ends with 5. It is a melody without a primary tonic. The old theory, which calls the last note of any melody



the "tonic" or "key note"—although there is no complete agreement on this matter—would regard 5 as the key note in this case; and since the Major Third (25) of 5 does not appear in the melody, but the Minor Third (3) does, the old theory would say that this melody is a melody "in minor." Now, according to the theory mentioned above, which Herzogenberg has brought forward, the interval of the Minor Third of the key note would have to be represented by 3:7. The whole melody then would be represented by the following numbers: 27, 9, 5, 21, 9, 135, 9, 5, 9, 27, 21, 5, 21, 9, 9, 135, 9, 5, 9, 135, 9, 5, 9, 27, 21, 5, 21, 9. I have tried in this case as well as in others the intonation corresponding to Herzogenberg's theory. The result of this examination convinces me that Herzogenberg's theory cannot be accepted as a general theory.

12. LITHUANIAN FOLK SONG

I tried first to represent the above melody by numbers in such a manner that the last note corresponds to 2. Yet the melody sounds out of tune in that intonation. The intonation that corresponds to the numbers above the notes appears to me to be the right one. So this melody proves to be a melody without a tonic, ending with 9.

How the lack of a primary tonic in the melodies of the second class, the want of a tonal basis at the end of the melody, acts upon the hearer, is well known by every music lover. This pe-



culiarity of the aesthetic effect of these melodies is readily understood from our theory. It cannot be understood from the old theory.

13. CANON, SUMER IS ICUMEN IN

In the mediaeval canon, Sumer is icumen in, which I give in musical notation including the bass, I determined the most effective intonation as the one corresponding to the numbers above the notes. This then is a melody without a primary tonic. Of course, it is not a priori impossible to understand the melody (as it is noted down by the composer) as a melody with a tonic (f=2).



In that case the beginning must be represented by the following numbers: 2, 15, 27, 15, 2, 2, 15, 27, 3, 5, 5, 21, 9, 5, etc. The other intonation, however, appears to me by far preferable. Very

noticeable is the aesthetic difference of the two intonations in the three bars XVII, XVIII, XIX (f, d, f), which are separated from the other parts of the melody by long pauses. In the one intonation we have 2, 27, 2, i. e., tones not related. Such a succession of unrelated tones is only possible when both of them are related to a third tone that precedes or follows, e. g., 3, or 15. 3 indeed precedes and 15 follows, but the time interval is very great. So this intonation gives very little aesthetic satisfaction. In the other intonation we have f, d, f represented by the closely related tones 9, 15, 9 (relationship 3-5). This causes a satisfactory aesthetic effect. We recognize now how confusing it is to speak here simply of a "diatonic scale." It is then quite impossible to distinguish between different intonations. Therefore we should not use the term "diatonic scale" at all, but should accurately express in numbers the intonation whenever we discuss a melody theoretically.

CHAPTER IV

Psychological Laws effective in the Historical Development of Melody

The existence of the "diatonic scale" in theory and practice, and the distinction between music in the "major" and music in the "minor" scale are doubtless important historical facts. Our psychological analysis of melodies, however, did not lead us to such "scales" at all, and furthermore it discovered some serious defects in those theories which make the "major" and "minor" scales the basis of the classification and description of music. This disagreement between our psychological analysis, based on observation, and the common, rather speculative, musical theory, does not prove, of course, that our analysis is erroneous. Our psychological analysis, on the contrary, explains the development of the old theory of the "major" and "minor" scales as well as of the older musical practice corresponding to that theory. Theory and practice, if our psychological theory is right, could not easily have developed otherwise than they did. Now, the development of musical practice and theory does not depend merely on those psychological laws which we derive inductively from melodies, but, like all historical development, on a great number of causes. Yet, it is probable that these psychological laws are such predominant causes, that the general direction of development has been determined by them, while the other, we may say "accidental," causes produced only temporary deviations from that direction. We shall see that such is indeed the case.

We shall neglect all other possible causes that may influence the historical development, and shall regard our psychological laws as the only effective ones. One is then led to assume that the earliest music contains only simple melodies, i. e., melodies every tone of which is related to every other tone. It is interesting to determine the greatest possible number of such tones that may compose a simple melody, either one with a tonic or one without a tonic. Let us examine the right hand column of our table (page 14) and, beginning with the smallest figure, mark those figures which fulfil the above condition of relationship. This will give us the tones 2, 3, and 5. Now the question arises, Should we add 7 to them? If we do so, we notice that this excludes according to our condition the following 9 and the following 15, since 9 and 15 are not related to 7 (according to the observations, from which we started). Consequently, we omit 7 and add the two tones 9 and 15, which are both related to every one of the tones 2, 3, and 5. No further tone, as 21, etc., fulfils the condition of being related to every accepted tone. The "scale" we reach in this manner-if we choose to give this series of numbers this name—is: 2, 3, 5, 9, 15; or arranged according to pitch within one octave: 15, 2, 9, 5, 3; or beginning and ending with the same number, in this case where there is a tonic, beginning and ending with the tonic: 2, 9, 5, 3, 15, 2.

The melodic advantage of omitting 7 and using 9 and 15, should not be measured simply by the fact that if we accept 7 we have a scale of four notes, if 9 and 15, five. We know that four elements permit only six combinations of two elements each (the mathematical formula is $\frac{n (n-1)}{1 \cdot 2}$) whereas five elements permit ten such combinations. This melodic advantage may be regarded as one of the psychological causes of the late and rare occurrence of the pure 7 in music. It is not the only psychological cause, however, as we shall see later.

In order to develop music to a higher stage, it is necessary to introduce further tones, even though these are not related to all other tones that are used, but only to some of them. The natural thing to do is to make 3 a secondary tonic, *i. e.*, to use 3 as the tonic of a partial melody. We must expect 3 rather than any

other tones of the above "scale" to be used in this way, since 3 is more closely related to the primary tonic 2 than either 5, 9, or 15.

2 appears in the following relationships: 2-3, 2-5, (2-7), (2-9), ((2-15)). If we make 3 a secondary tonic and use only the relationships of the first degree, we make use of the tones 9 and 15. We need not add 9 and 15, since our scale contains them already. But our aim is to introduce new tones. If we make use of the relationships of the second (but not of the third as yet) degree, viz., (2-7) and (2-9), we have to add to our "scale" the tones 21 and 27. We are now able to introduce partial melodies with 3 as a secondary tonic. These partial melodies may be composed of the five tones 3, 9, 15, 21, 27=3 (2, 3, 5, 7, 9), not only of 3 and the two tones we have added. We may now use 9 also for a secondary tonic in connection with 27. Further, 27 is related to 15, and 21 is related to 9 as well as to 15, so that we gain three more possibilities for partial melodies without a tonic. The addition of these two tones has therefore a very much greater significance than we had originally in view.

We thus arrive at the following conclusion. If we assume that the historical development of music follows, so to say, the line of least resistance, *i. e.*, that closer relationships are used earlier than more remote ones; the stage of melody following directly the stage of "simple" melodies, must then be represented by melodies composed of the tones 2, 3, 5, 9, 15, 21, 27; or arranged according to pitch: 2, 9, 5, 21, 3, 27, 15, 2; or, if we use tempered intonation and express the intervals of two successive tones as twelfths of an octave: $\frac{1}{12}$, $\frac{1}{12}$, on the piano by the white keys. The fact that this scale actually represents a certain stage of music (folk song before the development of "modern" music) proves that the historical development is indeed, on the whole, in accordance with our assumption of the historical importance of the psychological laws of melody.¹

¹ In using 3 as a secondary tonic, the relationships of the second degree,

Of all other circumstances which have probably influenced the fixation of the "diatonic scale," we may mention a few. One such circumstance is to be found in the fact that the maker of certain very old musical instruments, e. g., the flute, detected some regularity in musical instruments employing the notes of the diatonic scale. We may regard the "scale" as divided into two equal parts by the middle interval. The first part begins with the tonic 2, the second with 3, the tone that is most closely related to the tonic. When now we look at the arrangement of the holes of a flute, we notice in going upwards in pitch that the holes of the first part of the scale are arranged in the same way as those of the second part; viz., in both cases two larger distances are followed by a smaller one. The same regularity in the arrangement of the intervals of the scale may be recognized, of course, from a merely psychological (though not "musical") consideration. Two larger distances of pitch are in both parts of the scale followed by a smaller one. This fact was noticed and theoretically made use of even by the ancient Greek theorists. And it may, through the influence of the theorists, have determined, to some extent, the development of musical practice. It has hardly any significance, however, for a psychological theory of music.

Another accidental regularity of the scale, without significance for a correct (psychological) theory of music, but having a certain historical importance, is to be found in the numerical speculations of Zarlino and Rameau. When we represent the "diatonic scale," not by those numbers by which our experiments with folk songs teach us it must be represented, but by the numbers of Zarlino, 3, 27, 15, 2, 9, 5, 45, 3, which designate pitches differing but slightly from those of the right intonation, then the way for speculation is open. We may with pride point out that our "scale" does not contain any other numbers than products of 2, 3,

⁽²⁻⁷⁾ and (2-9), are represented by the tones 21 and 27; the relationship of the third degree, ((2-15)), is represented by the tone 45. The tone 45 does indeed appear in some folk songs.

and 5. But what scientific law prohibits the use of 7 in a "scale?" And why is the tone 3 called "tonic" by Zarlino, Rameau, Helmholtz, and their followers? One searches in vain the writings of these theorists for a satisfactory answer to these questions.

We saw above that the historic development of music "along the line of least resistance" explains why there is no pure 7—though there is 21=3.7—in the so-called diatonic scale, viz., the introduction of the 7 into "simple" melodies would have prohibited the use of two other tones, 9 and 15, in such melodies. Yet there is still another reason for the infrequency of 7 in music. Suppose that one of the early, yet inexperienced, composers had played or sung or simply imagined the following melody: 2, 2, 5, 3, 7, 3, 5, 2, 2; suppose, now, that he had happened to replace the last 2 by 4. He must at once have noticed the extraordinary change of aesthetic effect, produced by so small an objective change as the substitution of 4 for the last 2. The new melody must be represented, in order to avoid fractions, by 3, 3, 15, 9, 21, 9, 15, 3, 2. How the great increase of beauty is caused, is easily seen. Instead of a "simple" melody we have now a complex melody containing a partial melody with a secondary tonic; besides, the number of melodic relationships is greater than before because of the relation of 2 to 9 and 15. A composer who has had this experience once, will hardly ever forget it. Let the reader, who, I suppose, possesses some musical experience, sing the first melody; he will easily notice the strong tendency of substituting the interval 3-2 (which may mean, e. g., 3-4) for the last interval 2-2 and thereby increasing the aesthetic effect. This substitution causes the change of 7 into 21. The use of the pure 7 would give us a melody of rather poor aesthetic effect, while the introduction of a single new tone would give us a melody of comparatively very great aesthetic effect. The reader who will make these facts the basis of further reflections, will no longer find any difficulty in understanding why the pure 7 is not used in early music, although the 21 is used.

We tried to make clear the influence of psychological laws upon the historical development of the "diatonic scale." Yet we have entirely neglected the fact that we find in the common musical theory two scales, the "major" and the "minor" scale. necessary to remember that there is a second class of melodies, those without a tonic, the historical development of which we shall consider now. There are more ways of constructing scales according to simplicity of development here than where one tone Many series of tones (scales) may be derived (2) dominates. with little difference in the proximity of their relationships. This corresponds to the statement, common among musical theorists, that the intervals of the minor scale are not so definitely fixed as those of the major scale. I must, however, warn the reader against identifying melody without a primary tonic with what is called by musicians melody of the minor scale. Melody of the minor scale is indeed invariably without a primary tonic. But melody without a primary tonic is not always melody of the minor scale. The Lithuanian folk song, e. g., which I mentioned in the preceding chapter, I prefer to hear as a melody without a primary tonic. Nevertheless, musicians would call that song a melody of the major scale, because of the particular arrangement of the tones when noted in tempered intervals.

The simplest melody without a tonic, with relationship of the first degree only, consists of the tones 3 and 5. We may now use 3 or 5 or both of them as secondary tonics. In this way we derive smaller or greater series of tones which would be called "minor scales" by musicians. E. g., in the folk song 11, which is a melody without a primary tonic, 5 is strongly emphasized by the composer by combining it with 15, 45, and 75, and so using it as a secondary tonic. By adding 3 to these four tones the peculiar aesthetic effect of a melody without a primary tonic is added to the aesthetic effect of 5 as a secondary tonic.

Another case where 3 and 5 are the chief tones of a melody, but where 3, not 5, is used as a secondary tonic, is the *Miserere* in

Verdi's *Trovatore*. The first part of it is the following twice repeated melody: 3, 45, 3, 27, 3, 5, 21, 5. This is a melody without a primary tonic, but 3 is used as a secondary tonic in combination with 45, 27, and 21.

When we survey the Complete Scale in order to determine the greatest number of directly related tones which may compose a melody without a primary tonic, we must omit, of course, the 2, this being the primary tonic. We may accept 3, 5, and 7. The acceptance of 7, however, excludes the two following numbers, o and 15, since the tones 9 and 15 are not related to 7. We omit, therefore, 7, and accept 9 and 15. The next number, 21, we cannot accept, since it is not related to 5; nor can we accept 25, since it is not related to either 3 or 9. 27 is not related to 5. 35 is not related to either 3 or 9. 45 we accept, it being related to 3, 5, 9, and 15. None of the following numbers fulfils the condition of relation. Consequently the greatest number of tones which may compose a "simple" melody without a tonic is five, the same number as in the case of a melody with a tonic; and the five tones are represented by the numbers: 3, 5, 9, 15, 45; or arranged according to pitch: 9, 5, 45, 3, 15.

In order to develop music without a primary tonic from these five tones to a higher stage, it is necessary to introduce further tones into the above series of five. Into the series of tones representing simple melodies with a primary tonic we introduced further tones by making 3 a secondary tonic, using 3 for a secondary tonic since the tone 3 is more closely related to the primary tonic 2 than any of the rest. Now we must proceed in a different way, there being no primary tonic at all. More ways than one are open to us.

¹ By the way, I wish to mention here that, if we represent the whole *Miserere* by numbers, we must multiply all the above numbers of the first part by 9. This, of course, does not alter the relative pitches. The first part then ends with 45. The second part begins with 9. The second part is made up of the tones 9, 5, 45, 3, 405, 27, 225, 15, 135.

We may add a sixth tone under the condition that, though this sixth tone cannot be related to each of the five, it shall be related to four of them. This condition is fulfilled by 27, which is related to 9, 45, 3, and 15; 5 being the only tone not related to 27. We have then the following series: 9, 5, 45, 3, 27, 15. (Compare in the preceding chapter the Lithuanian folk song, 12.)

We may add other tones under the following condition: Each of the five tones 9, 5, 45, 3, 15 shall be regarded as a secondary tonic, and the new tones shall be determined by the ratio 2:3, which signifies very close relationship. This procedure yields two new tones, 27 and 135. The whole series arranged according to pitch is then this: 9, 5, 45, 3, 27, 15, 135. (Compare in the preceding chapter the Canon, 13.) Many other theoretical considerations may help us to develop the series farther. I will not continue, however, to do this at present. Let me say here that there is no difficulty in expressing the intervals of the last series, 9, 5, 45, 3, 27, 15, 135, by twelfths of an octave and in comparing the arrangement in which larger and smaller intervals succeed with the order of the intervals in the "tempered major scale." We notice at once that the two scales are identical. Such a comparison is quite common among musical theorists. Yet it is speculative rather than scientific. From a scientific (psychological) standpoint it is impossible to compare the arrangement of twelfths of an octave in different cases, since a distance of one-twelfth (or two-twelfths or three-twelfths, etc.) may actually represent very different ratios.

The above tones (accepted under the second condition), 9, 5, 45, 3, 27, 15, 135, 9, when represented by intervals of twelfths of an octave, yield the same arrangement of such intervals as do the tones, 2, 9, 5, 21, 3, 27, 15, 2, namely $\frac{1}{12}$, $\frac{1}{12}$, although the intonation in the one case is by no means to be identified with that in the other, and the one series contains no tonic, whereas the other does. This fact is one of the most serious causes of the present confusion in musical theory, vis., all theorems

ists have identified these two series and—since Zarlino—represented the intonations by a *third* series, namely, 3, 27, 15, 2, 9, 5, 45, 3, which happens to yield, when represented in twelfths of an octave, the same arrangement as these other two, $\frac{1}{12}$, $\frac{1}{12}$. They named this third series the "diatonic scale" and regarded 3 as the tonic, not knowing that this is psychologically impossible (for the psychological tonic is 2), and not knowing that many of the melodies which appear to be written in the diatonic scale, are actually melodies *without* a primary tonic (*e. g.*, our Lithuanian folk song and the Canon).

CHAPTER V

FURTHER COMMENTS CONCERNING THE THEORY OF MELODY

1. THE SEVEN IN MUSICAL THEORY

In the preceding chapter (on the Historical Development) I mentioned some of the causes of the infrequency of the pure 7 in music (though 2I=3×7 is quite common). Most theorists deny that the 7 has any significance in music at all; some, however, admit that the pure $7(21=3\times7)$ they leave entirely out of consideration) is used by modern composers. Wead, in his discussion 1 of my theory of melody, makes the following remark concerning this guestion: "The Greek theorists were content to work with 2 and 3, their products and powers. Zarlino broadened the foundations, as the author points out, by introducing 5. * * * Poole and others have insisted on adding 7. * * * This question of the 7 is not one of mathematical jugglery or of musical interpretation by the hearer, but simply this: Did the composer mean to use at a certain point a natural seventh (written 7, having a pitch 0.31 E. S. below Bb in the scale of C), and score the passage for an instrument that could give it (horn, violin, etc.)?" I heartily agree with Mr. Wead that "the question of the 7 is not one of mathematical jugglery," but his other remarks do not fit into my system of thought. I have three methodological objections, which I shall mark a, b, and c.

a. For what *instrument* a passage is scored, cannot decide any theoretical question; for, if that were the case, it would mean the theoretical exclusion of, not only 7, but also of 5 and 3, in all music written for the piano or the organ, since in these instruments the ratios are *irrational* numbers.

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¹ Psychological Review, VII (4), p. 404.

- b. To speak of "a pitch o. 31 E. S. below Bb in the scale of C" is possible only on the (a priori, axiomatic) presupposition that there is such a thing as "a scale of C." A melody containing no tonic, made up, e. g., of the tones 9, 5, 45, 3, 27, 15 (I am using my own numerical notation; so the reader knows what these numbers signify) would be a theoretical enigma on that presupposition. Since neither 9, 5, 45, 3, 27, nor 15 is a tonic, there is no tone to be named C, and, without a C, no pitch can be determined as 0.31 E. S. below Bb.1 Wead's definition of "the question of the ?" prohibits any investigation into the use of the 7, save in melodies which contain a tonic. But even if we restrict our investigation to melodies with a tonic, Wead's definition is too narrow. The question of the 7 is not the question of the theoretical significance of the pure 7 alone, but the quite general question whether the 7, simple or in combination with a coefficient (as in 21, 35, etc.), has theoretical significance or not, just as Zarlino's use of the 5 does not mean simply the introduction into musical theory of the pure 5, but also of combinations of 5 with powers of (2 and) 3. (Zarlino's diatonic scale, "3, 27, 15, 2, 9, 5, 45, 3," contains the products 15, 45!) Consequently Wead's definition of "the question of the ?" must be rejected.
- c. Wead's distinction between "musical interpretation by the hearer" and "the composer's meaning," is hardly justified psychologically. How can we know what Bach or Beethoven or Mozart meant, except by experimenting upon ourselves, assuming that the general psychological laws of melody applied to them as they do to us? We cannot call up their spirits to answer our questions. And why should we not assume the same general laws for them as for us? That we are not great composers, not geniuses, as they were, is no objection. Are not the general psychological laws of space perception the same in us as in Michelangelo and

¹We may, of course, arbitrarily name any tone "C," but Wead means to designate by "C" a tonic and by "Bb" a pitch of a definite relation to the tonic, the interval being two equally tempered twelfths of an octave.

Raffael? Why should we assume this to be different in auditory perceptions? We cannot create like those musical geniuses, but we can enjoy their creations as they did themselves. When a composer "means to use" a certain intonation, what is this other than "the musical interpretation by the hearer," only that "hearer" and "meaner" are the same person in this particular case? Had Beethoven been born deaf, he could not have been what he was: there is no "meaning" without "hearing." (I am perfectly aware of the fact that Beethoven was deaf in his later life; but "hearing," of course, includes auditory imagery.) The difference between Beethoven and us certainly does not consist in this, that the fundamental psychological laws of his nature differed from those of normal human beings. The identity of these laws is simply the conditio sine qua non of his greatness; for a man is great only so far as his influence reaches other men. Just as the composer "means" by hearing, so we find out his meaning by hearing. Only he who denies the identity in different human beings of the fundamental psychological laws can deny the possibility of finding the composer's meaning in this way. Of course, where we find more than one possibility of intonation, there we cannot always be sure which one the composer would have preferred.

2. Tempered or Just Intonation?

Wead in his discussion of my theory of melody quotes the following remark of Professor Donkin,² of Oxford, "who was an accomplished musician and had a profound theoretical knowledge of the science of music" and wrote on Greek music for Smith's Dictionary of Antiquities: "The structure of modern music is founded on the possibility of educating the ear not merely to tolerate or ignore, but even in some degree to take pleasure in slight deviations from the perfection of the diatonic scale." By "diatonic scale" he means, of course, the intonation represented by the numbers of Zarlino: 3, 27, 15, 2, 9, 5, 45, 3, where 3 is sup-

²Acoustics, Oxford, 1870, pp. 25, V.

posed to represent a primary tonic (a psychological impossibility!). I certainly agree with Donkin that the ear takes pleasure in deviations from *this* scale, but I disagree with him when he attributes "perfection" to that scale. The ear takes pleasure in these deviations simply because only by such deviations is an aesthetically perfect intonation possible.

Wead also quotes these sentences from an article ¹ on Wagner's methods: "His other innovation, which is not even yet acceptable to all ears, is to employ the chromatic scale of twelve equal semitones as a basis for melody instead of the diatonic scale. The whole of the music of *Tristan and Isolde* would be impossible under the old laws. I need only quote one example, and by no means an extreme one, of a passage impossible to sing or to listen to in anything but *strictly equal temperament* [he quotes the duet "Blissful Dreams"]. It is a constant wonder to me how singers trained upon diatonic scales can sing this and many still stranger passages with anything approaching bearable intonation."

I do not know who is the god that inspires the Musical Times. It is doubtless not the god of Science. I determined that pure intonation of the duet of Wagner in which, according to my judgment, it produces the greatest aesthetic effect, certainly a greater effect than in mistuned (equally tempered) intonation. I did not find any serious difficulty in doing this. Of course, it takes timevery much time indeed. But this is no reason for giving up the work and assuming that the melodies sung by Tristan and Isolde cannot be theoretically understood, that they do not possess any aesthetic structure, that they are not melodies at all, but merely a howling up and down in steps which for some reason or other are defined by dividing an octave into twelve equal parts—why twelve, no one knows. (One recalls the fact that according to some Oriental theorists the howling up and down proceeds in 17 steps.) In spite of the authority of the Musical Times who permits only "strictly equal temperament," I shall analyze the melodies and

¹ Musical Times, London, October, 1896, p. 652.

show their structure. To me it is by no means a constant wonder that singers trained upon diatonic scales can sing the strange [?] passages of Wagner. It simply proves that ultimately the psychological laws of melody come out victorious against misdirected training based on theoretical prejudices. I shall not, however, analyze the melodies in this duet at present. I wish to use the duet with its accompaniment as an example of the combined effects of melody and harmony, and shall therefore postpone the discussion of the melodies until I am able to take up, in a later chapter, the discussion of the harmonies also.

Let me mention here that just as little as I believe in tempered intonation of Wagner's music, do I believe in the theory that the music of Oriental peoples rests upon psychological laws fundamentally different from those of the European peoples. I wish I could add to the musical examples analyzed in a previous chapter an Arabian melody containing a "quarter tone," since the quarter tone has been used as an argument in favor of the theory of a fundamental difference of the aesthetic laws. Many Arabian "scales" with a quarter tone are to be found in different books. Yet scales alone are worthless for the science of music. I have been unable to find and to analyze any real melody containing a quarter tone, although there is no doubt that such melodies are used in the Orient. According to my theory there is nothing wonderful in the fact of a quarter tone in a melody. E. g., a melody made up of the tones 35, 9, 5, 21 may contain a "quarter tone" of the interval 35:36.

3. THE CLOSE ON THE TONIC

In Wead's discussion of my theory (p. 404) I read the following words: "The demand for a close on the tonic, on which he lays so much stress, is not commonly met with in Hindu music; though the final may be C, 'accidentals' (if Dr. Meyer will pardon the word for want of a better one) have often destroyed the feeling that the tune is in the key of C; and it is rare to find a

Hindu tune that seems to ordinary musicians to end right." I am far from denying the facts which are above referred to. Yet the words "on which he lays so much stress" seem to indicate a partial misunderstanding of my theory. On page 257 of my previous paper I made the following statement: "One of the most elementary psychological laws of melodious succession is, that no hearer is satisfied, if after having heard the tonic 2 once or more often, he does not find 2 finally at the end of the melody." This I consider a natural law, though in a special case it may not be strictly true. To make this clearer by analogies: No one denies that Kepler's laws describing the movements of the planets are natural laws, and yet everyone knows that they are not strictly true, though the deviations are produced, not by chance, but by certain definite, but complicated conditions. In aesthetics, it is doubtless an important law that a painting must be in accordance with the principles of perspective. No one calls a painting perfect that is defective in this respect. Yet paintings which show defects of such a kind are regarded as works of art notwithstanding. Exceptions do not necessarily contradict the law. Why should we expect music never to neglect the above aesthetic law of melodious succession? I do not expect this and have not made such an assertion. Nevertheless the law is a natural law.

When a Hindu tune does not seem to an ordinary musician to end right, the question arises whether the melody as perceived by this musician is indeed the same as that perceived by the Hindu musician. We learned from several examples that a melody—if we mean by this term a melody as noted down in imperfect musical notation or played on an imperfectly tuned instrument or sung in impure intonation—may represent very different melodies in pure intonation and may, accordingly, act psychologically in very different ways upon different hearers. I will make this clearer by an analogy. It is well known that a certain design on a flat piece of paper may be perceived by one person as a flight of steps, by another (or the same person at another time) as an

overhanging piece of brick wall. So a certain "melody"—as above defined—may be perceived by one hearer as a melody with a tonic, by another as a melody without a tonic. Whether these Hindu tunes violate an aesthetic law or not, cannot be decided so easily. First we have to determine whether the tunes are melodies with a tonic, or—more probably—melodies without a primary tonic, misinterpreted by the biased European hearer, who is apt to assimilate a new experience to experiences with which he is already familiar. I regret that I have not had time enough to study Hindu music so closely as to express a decided opinion concerning this problem.

Of course, music which violates an aesthetic law most likely does it in a manner not particularly effective. I do not think it impossible that, e. g., in a recitative of Wagner a pure 2 appears once and never again. The aesthetic effect of the movement from a related tone to 2 may be in such a case—among the great number of simultaneous effects—comparatively too weak to leave an unrelieved dissatisfaction. Yet I am not quite sure whether cases of this kind may not be partly responsible for the dislike many persons have to Wagner's "endless melody."

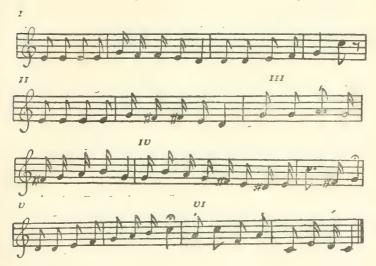
4. SCHUBERT, HEIDENRÖSLEIN

It would doubtless be interesting to analyze in the same manner as I analyzed short melodies, a very long and complicated piece, e. g., an opera. The limitation of space forbids this here. Yet Schubert's song "Heidenröslein," may serve as a brief example of this kind. My opinion as to the intonation of this song has been subject to some changes. I shall here describe only the in-

¹ Some readers (more in the habit of speculative than scientific thought, as it happens sometimes) may perhaps conclude: "He feels compelled to change his previous opinion; consequently his whole theory is useless." To them I have to say that the above change of opinion is no argument either against the general principles of my theory or against my method of investigation. It is simply a further demonstration of the fact that sometimes two different intonations may produce very nearly the same aesthetic

tonation which at present I believe to be the most effective aesthetically.

The first part is a comparatively simple melody which ends with a tonic. It is represented by the numbers 5, 3, 21, 5, 9, 5,



21, 3, 2. In order to simplify the description, I do not repeat the numbers where the same note is repeated several times. The second part is a melody without a tonic, the intonation of which is represented by 5, 3, 45, 5, 9. The third part taken alone is identical with 2, 9, 2, 15, 2, 9, 5, 2. It is a melody ending on its tonic. The note, however, which is here called 2, is represented in the song by 3. We must therefore multiply all the above numbers by 3. The third part is then represented in the song by the numbers 3, 27, 3, 45, 3, 27, 15, 3, the 3 being the (secondary) tonic of the partial melody. The intonation of the fourth part is represented by 3, 15, 27, 3, 45, 5, 75, 5, 63, 45, 3. It is a melody without a tonic. It begins and ends with 3, so that it is closely related to the

effect, and that, in such a case, the actually preferable intonation can be found only by patiently experimenting, not by deducing from a priori reasons, not by forcing a special piece of music into the Procrustean bed of a "scale" of an arbitrarily limited number of tones (the "diatonic scale" of Zarlino, Rameau, Helmholtz).

third and fifth parts. The fifth part, represented by the numbers 9, 5, 21, 3, 27, 15, 2, leads back to a tonic 2. The sixth part I originally represented by 27, 63, 21, 27, 2, 5, 9, 2. I prefer now, after continued trials, to use for the last part the intonation 15, 9, 3, 15, 9, 45, 5, 9, instead of 27, 63, 21, 27, 2, 5, 9, 2; i. e., the last part is a melody without a tonic. The tone 9 is identical with the tone represented in the preceding parts by 2. This must be avoided. The old theory often expresses identical tones by different numbers and different tones by identical numbers, and, in order to solve such contradictions, introduces the conception of "modulation," of "change of key." This conception of modulation, however, involves the theoretical acceptance of Zarlino's "diatonic scale" as the basis of all music. This "diatonic scale" being a psychological impossibility, we must reject the conception of modulation and must consequently, throughout the whole piece of music, represent different tones by different numbers, whatever the musical notation may be, and identical tones by identical numbers. We can easily satisfy this demand since our Complete Scale permits us to represent by numbers any undivided piece of music, be it so complex and extensive as Beethoven's Ninth Symphony or an opera of Wagner. So we must represent the undivided song of Schubert by numbers, in such a manner that different tones are represented by different numbers, identical tones by identical numbers. In the last part we had to substitute 9 for 2. Therefore we must substitute in all preceding parts 9 for 2, but without altering in the least the relative pitches, the relative intonation. (The absolute pitch is, of course, quite arbitrary, without any theoretical significance.) We do this by multiplying all numbers of the parts preceding the last by 9. The result is to be seen on a later page where I shall discuss Schubert's harmonization of this song. We now recognize that Schubert's song as a whole is a melody without a primary tonic, that it is to be divided into six parts the first of which is based on 9 as a secondary tonic, the second is a melody without a tonic, the third is based on 27 as a secondary tonic, the

fourth as a separate whole is again without a tonic, the fifth contains (and, of course, closes on) 9 as a secondary tonic, the sixth is a melody without a tonic. The first five parts taken as a whole are a melody that closes on its tonic, to which is added the last part as a melody without a primary tonic, but made up of tones related to the tones of the preceding parts.

Similar, yet still more complicated, is the structure of more comprehensive pieces of music, as sonatas, operas, etc. The analysis of this song, I believe, will show the reader how to proceed in analyzing a more complicated piece.

CHAPTER VI

Aesthetic Laws of Harmony 1

Harmony—as compared with melody—is the totality of psychological effects observed in simultaneous tones. It is by no means such a simple phenomenon as it is often assumed to be. We shall see that we have to recognize at least two distinct aesthetic effects in harmony. When we hear the two tones, 3 and 5, or I and 2, simultaneously, we notice something very familiar, namely relationship. Since we found the same relationship in melody, and melody is the only essential of music, we may call it in honor of melody—"melodic relationship" in simultaneous as well as in successive tones. There is this advantage of speaking of "melodic" relationship: by this adjective we express our opposition to the common theory, which assumes that relationship is to be found primarily in simultaneous tones. Those who adhere to this theory explicitly call relationship "harmonic," in order to express their opinion that relationship in melody is an imaginary psychological phenomenon only. According to them, the hearer knows merely that he would observe it if the tones were sounded simultaneously. Such a theory is that of Stumpf. (It is sufficiently plastic to serve as an evolutionary explanation of the existence of the relationships.) Relationship is actually experienced in melody as well as in harmony. If we choose to call it "melodic," we simply do so in order to honor melody. Since it is the same relationship in simultaneity as in succession, we may classify it in the same manner as we did above: 2-2, 2-3, 2-5,

¹The critical reader, who compares this article with my earlier writings, will doubtless detect some inconsistencies concerning *terminology*. To him I am not ashamed to confess that I do not feel compelled to retain what now seems imperfect to me.

3-5, (2-7), (3-7), (2-9), ((5-7)), ((5-9)), ((2-15)). The second psychological phenomenon observed in successive tones has no place in simultaneity. The specific aesthetic effect of the 2 when heard alternately with 3, 5, 7, 9, or 15, depends upon succession. Whether the 2 produces in simultaneity any specific aesthetic effect, instead of the one in melody just mentioned, I cannot tell. I have not found any, and leave this question open.

Melodic relationship in succession as well as in simultaneity of tones is a phenomenon conditioned by *two* tones. In chords which contain more than two tones, we must consider the relationship of every possible combination of two tones. *E. g.*, in the chord, 5-3-7, we observe three relationships, 5-3, (3-7), and ((5-7)). In the chord, 27-135-5-3, we observe relationship between 27 and 135, 27 and 3, 5 and 3; we notice the absence of relationship between 27 and 5, 135 and 5, 135 and 3.

I mentioned that the second psychological phenomenon in successive tones, which depends upon one of two related tones being a pure power of 2, is impossible in harmony, of course. Still, we observe in harmony another phenomenon, which does not exist in successive tones, viz., consonance. We may try to make clear what is meant by the term consonance by saying that there is in some cases of simultaneous tones a higher degree of "unity" (other terms often used are "blending," "fusion," "Verschmelzung," "harmoniousness") than in other cases. But description can never take the place of actual experience of this phenomenon. We may best observe these different degrees of consonance in making the following experiment. We take two tuning forks, without resonance boxes, and keep one of them close to the one ear, the other close to the other ear. This distribution of the tones is necessary in order to avoid the disturbance caused by beats, when both tones are heard with one ear. Now, we notice, e. g., in the tones 7 and 5 a higher degree of a certain phenomenon than in the tones, say, 7 and 27, but a less degree than in, say, 2 and 5. I shall use for this phenomenon the term "consonance," not any of the other terms above mentioned, which are more or less ambiguous. The word "dissonance," commonly used by musicians, is not a necessary scientific term, though we may use the word in order to designate comparatively slight degrees of consonance.

Stumpf has paid more attention to the phenomenon of consonance than any previous writer. He sometimes uses the term "consonance," sometimes the term "fusion" (Verschmelzung) to designate the phenomenon in question. In his book on Consonance and Dissonance 1 he tried to explain every musical fact by reducing it to "consonance." He was, of course, not successful in this. His treatise is excellent in its criticism of older theories, but its positive statements simply add to the existing confusion. Stumpf's mistake consists in his utterly failing to distinguish between "melodic relationship" and "consonance" of simultaneous tones, as two distinct elements of what is commonly called "harmony."

While we can speak of melodic relationship only in pairs of simultaneous (or successive) tones, we have to recognize a degree of consonance of a compound sound, however great the number of the constituent tones may be. With respect to melodic relationship we found that there are close and more remote relationships, and that in many cases (e.g., 5-11) there is no relationship at all. This is different with consonance. Here we can never say (according to Stumpf, with whom in this respect I agree) that there is no consonance at all. Dissonance means merely a comparatively slight degree of consonance. The investigations of consonance by Stumpf and others were made with duads of tones only. But few observations have as yet been published on the conditions of consonance of triads and chords of more than three constituents. All we know is that the degree of consonance depends in some manner upon simplicity of numerical relations, similarly as melodic relationship does. In duads we observe a high degree of consonance where we find a close relationship, a

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low degree of consonance where we find a remote relationship or no relationship at all. In triads, tetrads, and more complex chords there is no such simple relation between the consonance and the relationships. Here a low degree of consonance is often combined with comparatively close relationships. E. g., the two triads 2-3-5 and 3-5-15 contain exactly the same relationships, namely, 2-3, 2-5, and 3-5; yet the consonance of the latter chord is much less than that of the former.

We must now ask what is the relative importance in music of the two elements of harmony, viz., of melodic relationship in the several pairs of the chord tones and the degree of consonance of the chord as a whole.

This question is easily answered. Every one knows that the greatest beauty of, say, a triad of tones, is not to be found where the degree of consonance is the highest possible, i. e., in the case of three tones in intervals of octaves. The aesthetic effect of, e.g., the triad 2-5-3 is much greater than that of the triad 2-2-2. This fact has naturally caused much trouble to those who do not distinguish between "melodic relationship" in simultaneous tones and "consonance." It is the crux of their theories. For us there is nothing wonderful in that fact. It simply shows us that melodic relationship is just as important in harmony as consonance. In the triad 2-2-2 there is only the one relationship 2-2 three times. In the triad 2-5-3 there are three different relationships. It is no wonder that the greater variety makes the latter chord aesthetically more effective than the former, though the consonance of the latter is less than that of the former; yet the consonance of 2-5-3 is rather high still. We now also understand why the chord 5-3-15 is so much used in music, although it possesses a comparatively slight degree of consonance. Yet no other triad combines three different and so close relationships with such a comparatively slight degree of consonance, a combination which in particular cases is aesthetically very effective.

In all the preceding discussions of the aesthetic effects of

harmony I have supposed that the various chords are heard perfectly analyzed, i. e., that all the constituent tones of a chord are noticed as different pitches. This, however, is an ideal condition, that is often not, or imperfectly, realized. It depends upon the practice of the hearer in analyzing, and this practice, of course, is different with different individuals. It depends also upon the simplicity or complexity of the chord that is to be analyzed. In some cases we do not expect the listener to hear a sound analyzed at all. We know that the tones of musical instruments are composed of a fundamental tone and a greater or smaller number of overtones: yet the composer who writes a sonata for the piano does not expect the hearer to notice the different overtones as pitches. However, even the tones as noted down in the score are not noticed by every one at every time as pitches, as they should be in accordance with the composer's ideal. What then is our state of consciousness when not all of them are noticed as pitches? We may understand this best by discussing a special case as it occurs quite commonly. Imagine that a person hears the three simple tones of 300, 400, and 500 vibrations in a second, but notices only the pitch of 400. The tones 300 and 500, though not noticed as pitches, are psychologically not ineffective in such a case, but determine what is called the "quality" of the tone whose pitch is noticed, i. e., here of the tone 400. (Some use instead of "quality" the French term, "timbre," or the German, "Klangfarbe.")

The confusion which exists concerning the psychological theory of "quality of tone" is so great that it is well to add a few remarks on this phenomenon. Most writers insist that a simple tone has no quality, but that a compound sound has. This theory is not based on observation, but on speculation. Stumpf seems to have been the first to emphasize that a simple tone possesses "quality" (Farbe, Tonfarbe) just as well as a compound sound (Klangfarbe). We may understand this from the following experiment. Sound the simple tone 100, add the weaker tone 200, but concentrate your attention upon 100. One then notices the pitch 100 and

a certain quality which may be theoretically best understood when compared with the visual sensation resulting from mixing white and black on a color wheel. The quality we notice is neither the quality of 100 nor that of 200, but a new quality similar to that of 100 as well as to that of 200. The relative intensity of the two tones is here effective. Now, when we make 200 weaker and weaker until it disappears entirely, we do not notice that a phenomenon which existed before has disappeared, that there was quality before, but that there is none now. That is not what we observe. We observe that the quality changes, but not that it disappears. Now add the tone 50, first very weak then with a little increasing intensity, but do not pay attention to its pitch, but only to the pitch of 100. One does not observe then that the quality of the pitch 100 reappears, but simply that it continues changing in the same direction. Another argument for distinguishing between pitch and quality of a simple tone is this: With very low tones (say, below 25 vibrations) and very high tones (say, above 12,000 vibrations) one is unable to recognize musical intervals; nevertheless one is able to judge that a tone of 20 vibrations is lower than one of 25, and a tone of 16,000 higher than one of 12,000. This may be theoretically explained by saying that the phenomenon of pitch is lacking in these extreme regions, but that the phenomenon of "quality" exists and permits us to judge. In a similar manner we may explain the fact that certain individuals possess in a high degree the so-called "memory for absolute pitch" and are able to name every tone on the piano, but are unable to sing musical intervals.1 They possess a memory for "quality," but not for "pitch." This theory also makes it clear why certain individuals are able to name every tone on a familiar instrument, e. g., the piano, but find it extremely difficult to name the tones of another instrument or a voice. Their "memory for absolute pitch" seems to be much more a memory for quality than

¹ Such cases are mentioned by Stumpf, Tonpsychologie, II, p. 555.

for pitch. However, further details concerning quality have no bearing on our present investigation.

We return now to our above example of the chord 300, 400, 500. We suppose that it is not heard analyzed, but that only the pitch of 400 is noticed and a mixture of the qualities of 300, 400, and 500. In this case we observe that the aesthetic effect of the three relationships is lacking. This effect depends upon "hearing analyzed." Yet the "consonance" of the chord is noticed; it does not depend upon analysis. This observation teaches how important practice in hearing chords analyzed is for the aesthetic enjoyment of music.

I. DRONE BASS

Having discussed the aesthetic laws of harmony, we have to proceed to show that these laws govern, not only separate chords, but real music also, that their application to music enables us theoretically to understand music, without compelling us to *ignore* contradictions we cannot solve, or to make use of one of those "plastic" psychological explanations which are created for the special needs of the moment and consequently "explain" everything for the explanation of which they are created.

There is in music hardly a simpler form of simultaneity of tones than the drone bass, as produced by the bag pipe. That the drone bass is used in such an ancient instrument, that it is used in the simplest and oldest folk music, seems to indicate that it obeys a simple psychological law. Folk music easily gets rid of artificialities. We shall soon see why folk music makes use of a special tone for a drone bass. We saw that most folk songs are made up of the tones 2, 9, 5, 21, 3, 27, 15. Sometimes 45 is to be added to them, rarely another tone. Now we may ask: Is there any one tone that is melodically related in the first degree to all those seven tones? The answer is negative. We may further ask: Is there any one tone which is related to each of these seven tones either in the first or in the second (but not in the third) degree?

Here our answer is in the affirmative. 3 is this tone. It is rather closely related to all the tones, 2, 9, 5, 21, 3, 27, and 15. It is no wonder under these circumstances that 3 is so well suited to serve as a drone bass.

Yet not only melodies with a primary tonic, but also melodies without a primary tonic may be accompanied by a drone bass. E. g., melody II in a previous chapter is a folk song made up of the tones 15, 75, 5, 45, 3. It is easily seen that in this case there is one tone that is related to all these five tones in the first degree, namely 15. We may use 15 as a drone bass. Now I am perfectly sure that everyone who has been trained in the common musical theory, will at once think that this demonstrates the usefulness of speaking of a "dominant," because the drone bass in our two cases has the relationship 3-2 with the last tone of the melody. However, I cannot agree with those who introduce such a name. This name does not help us in any respect. The fact above mentioned is not general enough to be expressed by a special scientific term. Moreover, there is the danger that such a name will be thoughtlessly used as a startingpoint for speculation. Science is not hunting for names, but for facts.

2. CANON

A canon is a piece of polyphonic music in which exactly the same melody appears in the several voices, but in various phases. I mentioned in one of the preceding chapters the melody of the mediaeval canon, "Sumer is icumen in." In the following table the harmonies are given which correspond to the intonation that seems to me the most effective intonation of the melody in one voice. One may easily convince himself that the same intonation is the most effective intonation of the canon when sung polyphonically.

This result may be understood theoretically. If the reader will note down the melody in any other intonation and compare the harmonies obtained in that way, he will notice that no other

	I	11 111	IA A	VI VII VIII
	9-f" 9 135 ,	135, 9, 9 13		
		15	15 27 27 45 45	3 5 45 45
	9-f"			
Canon	,45 45	3 5 45 45	9 45	5 3 45 45 5 5 9
	9-f"			
1	9 45	5 3 45 45	5 5 5 9 45 27	15 15 27 27
İ	9-f"			9 9
	45 27	15 15 27 27		15 15
1	9-f 27 27	3 3 27 27 -	- 9 9	5 5 9 9 5 45 45
Bass				
	9-f ' 9 9 9	5 5 9 9	5 5 45 45 27 27	3 3 27 27

intonation yields in the harmonies such close relationships and such high degrees of consonance. In the harmonies, as found in the table, the chord 9, 27, 27, 45, 135, e. g., is one of the few which possess only a slight degree of consonance. Yet the relationships are rather close: 2-2 occurs once, 2-3 three times, 2-5 three times, 3-5 twice, ((2-15)) once. There is no tone within this chord that is not related to every other tone. Moreover, this chord is not a long, accentuated, but a short, unaccentuated chord, so that the low degree of consonance is less effective. This is also the case with the other chords of less consonance. In other intonations we should meet with chords of less close relationships and still less consonance. The accentuated chords in the first, third, fifth, and seventh bars are all very consonant and of close relationships. The fourth bar contains no accentuated chord. The accentuated chords of the second and sixth bars are specimens of the kind I mentioned above as being so common in music. They are made up merely of the tones 5, 3, and 15, and consequently contain only very close relationships, though the consonance in these cases is of a moderate, yet not of a very slight degree.

The tones 9, 5, 45, 3, 27, 15, 135 seem to me to be particularly suited for a canon. It is quite natural that a melody without a

primary tonic is better suited for this peculiar species of music than a melody with a primary tonic, with a definite aim. However, it is not a priori impossible to construct a canon that contains a primary tonic. Yet I am inclined to believe that most canons were meant by their composers as melodies without a primary tonic.

· The "octaves" in which the tones are used in this canon are represented in the table in this manner. I regard as the tones of one "octave" all the tones in the Complete Scale from 525 up to 2. All these tones are represented by the numbers on the same level in the table, and the (arbitrary) absolute pitch is designated by an arbitrary symbol on the same level. Whenever a number representing a tone of the same voice is set above the normal level, this means that it is the tone of the higher octave; when set below the normal level, it is the tone of the lower octave. E. g., 5 followed by 3 on the same level means that this 3 is the 3 of the same octave, i. e., the 3 a Minor Third higher than 5. 3 on a higher level than 5 means the interval of a Minor Third plus an Octave. 3 on a lower level than 5 means the interval of a Major Sixth. Movements which pass over an octave may easily be expressed by auxiliary lines. Of course, I do not propose to introduce this notation into musical practice. But for theoretical discussions, where the common musical notation is quite insufficient and the relative pitches must be represented by exact numbers, this seems to me the simplest way of designating the absolute pitch of the tones.

3. Heinrich Schütz

I will now analyze a piece of polyphonic music in which the several voices are different from each other. I select this piece because it has been made the subject of an important psychological discussion by Planck¹. Planck observed that a well trained

Planck makes the following remarks: "Bei der ersten Probe pausierte

¹Max Planck, Die naturliehe Stimmung in der modernen Vocalmusik, Vierteljahrsschrift für Musiktzissenschaft, 9, pp. 418-440. 1893.

chorus singing this piece was in unison with a piano at the first chord. But when the a of the piano was struck in the last chord, it was much higher than that sung by the chorus. The same lowering of pitch occurred again and again, although the singers were aware of it and tried to avoid it. Planck offers an explanation of this fact which I must reject as being psychologically unfounded.



Planck explains the lowering of pitch in this manner: The singers try to use in *melodic* succession tempered intervals, but alter this intonation a little in order to have the *chords* in *perfect* intonation. We start in this special case from the chord *c-e-g*, which—as a

das begleitende Klavier nach dem Beginn dieser Stelle oder wurde wenigstens so schwach, dass man es nicht hörte; als es dann am Schluss wieder einsetzte, war der Chor inzwischen so gesunken, dass der Dirigent abklopfte und die Stelle mit Klavier wiederholen liess. Dabei war der Gesang aber keineswegs unrein gewesen, im Gegenteil hatten die consonanten Dreiklänge in dem zarten pianissimo ganz besonders gut geklungen. Diese Erscheinung zeigte sich nicht ein einziges mal, sondern wiederholte sich in der Folge jedesmal wieder, sodass keine einzige Probe vorüberging, ohne dass der Tenor daran erinnert wurde, das e im ersten und das him vierten Takt recht hoch zu nehmen. Denn offenbar [? M.] liegt es an der Grossen Terz des Tenors, der sich später der Zweite (bezw. der Erste) Sopran anschliesst, und die nachher zur Quinte wird, dass die natürliche Stimmung hier den ganzen Chor um ein Komma hinunterzwingt."

chord—is sung in perfect intonation. The following chord a-c-e is again sung in perfect intonation. Now if each voice were using in melodic succession tempered intonation, the pitch of the e of the tenor and second soprano would be identical in both cases. In order to sing the chords in perfect intonation, however, the pitch of the e must be raised a little in the second chord as compared with the first. For in the second chord the e is a "Fifth," in the first it is a "Major Third," and the natural Fifth $\left(\frac{3}{2}\right)$ is nearly identical with the tempered one, but the natural Major Third is much lower than the tempered one. Now, since the tenor and second soprano do not raise the e in the second chord,

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		_		- ,	>	>	-		>		×	×	\times		. ^	×.
I Sopr	27	15	15	15	63	15	15		135	135	135	225	15	225	225	15
i j j	İ	—		-		_	_									
TTG	4.0		4.0				-									
II Sopr.	45	45	45	45	27	45	25		27	225	225	45	3	45	45	75
	_		_	_	1											
C' alto.	9	75	75	75	81	75	5		0.1	45	45		-	400	45	7F.
C alto	9	75	10	10	81	75	0		81	45	45		0	135	45	/5
		_									_					
Tenor 27 45	45	45	15	45	45	45	5	135	135	135	45	135	135	135	135	15
		_		-			Ŭ			100	, , ,		100	100	100	10
		ľ		1												
Bass	9	15	15	15	27	15	5		27	45	45	45	5	45	45	15
		_	_	-						_	_			_	_	

the whole chorus falls. Unfortunately, one of the psychological premises of this conclusion, namely, that there is a tendency of using tempered intonation in melody, is mere imagination. I perfectly agree with Planck in his assertion that the tendency of the singers to use pure intonation causes this lowering of the pitch on part of the whole chorus. Yet I do not agree with him in assuming that this is caused by the pure intonation of the chords in harmony conflicting with tempered intonation in melodic succession. I deny that there is such a thing as a singer's purposely intoning a melody in tempered intonation. The real cause of the lowering of the pitch we shall soon understand by a structural analysis of the piece of music in question.

In the table we find the whole piece represented by numbers, in such a manner that the numbers indicate what seems to me, after carefully experimenting, to be the aesthetically most effective intonation. All the chords, with the exception of XII, may be separately represented by much smaller numbers. I shall now discuss the structure of the whole piece and show that the simultaneous tones of each chord are connected by rather close relationship, and that the tones of each chord are closely related to the preceding or following chords, a connection which is the cause of the melodious effect of the whole piece. The chords I, II, III, and IV are all represented by 2, 3, 5, i. e., they possess very close relationships and a very high degree of consonance. V is represented by 3, 5, 7, 9. It is a less consonant chord, and the relationships are not so close. There is no relationship between 7 and 9, though 7 and 9 are not quite disconnected, since each of them is related to 3 and to 5. All the following chords from VI to XIV, with the exception of XII, are also represented by 2, 3, 5. The last chord, XV, is represented by 2, 5. XII is represented by 3, 5, 15, 135. This is a less consonant chord. The relationships between 3, 5, and 15 are very close. 135 is not related to either 3 or 5, but it is to 15, the relationship being (9-2). The harmonic structure being now clear, we may turn our attention to the melodic structure. We notice at a glance that, with two exceptions, each chord is connected with the preceding and following chord by identity of one or more tones. E. g., I and II contain the identical tones 45 (in various "octaves"). VIII and IX contain the identical tones 135. The exceptions are VII-VIII and XIV-XV. The latter chords, however, though not containing identical tones, are connected by rather close relationships. The relationships between 15 in XV and the tones of the chord XIV are 3-2, (9-2), and ((15-2)); the relationships between 75 in XV and the tones of XIV are 3-2, 3-5, and ((9-5)). The case of VII-VIII is different. Here most of the tones of the one chord are not related at all to the tones of the other; only 15 is connected with 135 and 27 by the rather remote relationships (2-9) and ((5-9)). The chord VIII is much more closely related to the chord VI than to VII. We shall soon see the practical significance of this. On the whole we should expect—from our theory—a rather strong aesthetic effect from this piece in this intonation. And its aesthetic effect is indeed strong. Other intonations do not yield the same aesthetic effect, and, when represented by numbers, they do not show such close theoretical relationships in melody and harmony, nor such high degrees of consonance as the above table indicates. This is a very satisfactory agreement between theory and practice, and makes the following conclusions the more certain.

We may now turn to the problem of the lowering of the pitch on part of the chorus. The first important fact which no one can deny is this: the several voices, when sung separately, sound extremely poor, particularly the contralto and tenor. They are, indeed, not intended to be sung separately. This is not without effect upon the singers, who usually pay a little more attention to their own voice than to the others, and so separate to some extent their own voice from the rest. The contralto begins with 9. The intonation of the following 75 is determined by its relation to 5 in VII, which in turn is related to 9. The intonation of 81 in V is determined by its relation to 9 in I. However, none of these relationships is very close, so that, in this case, the singer is not very firm in his intonation unless he pays attention to the close relationship of his tones with those of the other voices. In VII he sings 5. But now, in the following chord VIII, he has not the slightest hesitation as to intonation. He finds in his music that he has to sing exactly the same tone in VIII as in VII. Consequently, he firmly intones 5 instead of 81 and drags the whole chorus down by the interval 81:80, i. e., 0.22 E. S. Now, we must remember that the tone 15 (a) in the chord XV is already 0.16 E. S. lower than the a on the piano, if the tone g (c) in I is identical with the c on the piano. Therefore the a as actually sung by the chorus is more

than $\frac{1}{3}$ E. S. (0.38) lower than that on the piano, a difference which is very conspicuous. No wonder the director interrupted the chorus. But, on the other hand, it is now not surprising to us that the advice he gave to the chorus, was quite ineffective, as Planck reports. The director told the tenor and second soprano to intone the e in the first chord too high, i. e., to sing the harmonies *mistuned*. The singers, of course, did not do this, could not do this, but continued to intone as perfectly as their training permitted. The true cause of the lowering of pitch remained undiscovered, and it occurred again and again.

The reader may here justly raise the objection against this explanation that it does not seem likely that one voice should be able to direct the intonation of four other voices. This is generally true; but it is no valid objection in this special case. None of the other voices is by any means so sure of its intonation as the contralto, which finds in its music in VII and VIII identical notes. Furthermore, it is easily seen that the other voices themselves have a tendency, though not such a strong one as the contralto, to intone their notes in VIII too low; a tendency which causes them to yield readily to the confident intonation of the contralto. The tenor sings 5 in VII and 135 in VIII. If he knew that these tones were not related, but that 135 was related to 45 in VI (relationship 2-3), he would make no mistake in intonation. Yet he does not know this, but interprets the interval d-b as a "Minor Third" of the very close relationship 3-5. The interval 3-5 is 0.22 E. S. greater than the interval 5-135, as seen in the table of the Complete Scale. Consequently, the tenor has a tendency to intone the b 0.22 E. S. too low, and so he yields readily to the contralto. The case is the same with the bass. The interval 5-27 has no relationship; the interval 3-2 has very close relationship and is just 0.22 E. S. smaller than the interval 5-27. There is little doubt that the lowering of the pitch on part of the chorus could be avoided if we told the singers not, of course, to sing out of tune, as the director in Planck's report advised them, but to remember

the fact that the chord VIII is not related to VII, but very closely to V and VI. Unfortunately, I am unable to make this experiment, having no chorus of well trained singers with me.

In certain musical theories which pretend to be psychological, we find the term, "enharmonic confusion." This term supposes that a certain note in tempered intonation may be psychologically effective in two different ways simultaneously. E. g., a certain tempered tone in a piece of music, not exactly equal to 5 or to 81, but of a pitch slightly differing from 5 and 81, is supposed to be psychologically effective as 5 in relation to some tones, as 81 in relation to some others. This I must deny. There is no doubt that a tone slightly differing from 5 or 81 may be effective as 5 or 81, but it is not effective as 5 and as 81 simultaneously. I shall try to make clear what this means, by referring to an analogy. Above I mentioned the design which may be interpreted as a flight of steps or as a piece of overhanging brick wall. But one cannot see such a design as a flight of steps and as an overhanging brick wall simultaneously. That we are able to analyze and theoretically understand a piece of music like Schütz's, without the aid of an accessory hypothesis like that expressed by the term "enharmonic confusion," must be, I think, for any unprejudiced reader a striking demonstration of the superiority of our theory.

4. SCHUBERT

We now turn to a brief analysis of Schubert's "Heidenröslein," including the accompaniment. The whole song is represented below by numbers, according to the intonation which seems to me the most effective aesthetically. I have divided the song into seven parts. The numbers of the first five parts contain the common divisor 9. We may, therefore, when we consider these five parts separately, use the smaller numbers given below the numbers representing the actual intonation.

When we compare this song with a folk song accompanied by a drone bass, with a canon, and with the above piece of Heinrich Schütz, we observe the following facts: The drone bass alone does not possess any aesthetic effect, being one single tone. It

	a	b	С	đ	e	f	g	h	i	j	k	1	m	n	0	р	q,	r
Voice	45	45	45	45	27	189	189	45	81	81	81	81	45	189	27	27	9 -	_
(45		45			189	189		189		189		81		27	-	45
Accomp	9	9	9	9	9	9	81	81	9	81	135	81	189	135	81	9	135	9
		27		27			243	243		243		27		27		27	12	27
Divisor	9															Ī	1	-
Voice	5	5	5	5	3	21	21	5	9	9	9	9	5	21	3	3	2,-	=
(li	5		5			21	21		21		21		9		3	İ	5
Accomp	2	2	2	2	2	2	9	9	2	9	15	9	21	15	9	2	15	2
		3		3			27	27		27		3		3		3	į	3

Ш										Ш										
a	b	С	d	е	f	2	h	i	j	a	b	e	d	е	f	g	h	i	j	k
45	45			27	405			81	81	27	27	243	243	27	405	27	243	135	27	27
	45	- 1	45			405			405	1405	-	- 07	040	0.40	0.1	04	1405	105	45	07
9	9 27	9	27	9	9	81 243	243	9	81 243	135	81		243 729			81	405 567		45	27 63
-	6.8			_		270	270		1012				120	160			007	901		-
9						-				9	1							4.01		
5	5	5	5	3	45	45	45	9	45	3	3	27	27	3	45	3	27	15	3	3
2	2	2	5	2	2	45	9	2	9	15	3	63	27	27	9	9	45	45	5	3
-	3		3	_	Em.	27	27	6-	27		9	30	81	81			63	63		7

-11	V												V								
a	b	С	d	е	f	l g	h	i	j	k	1	m	a	b	С	d	е	f	g	h	i
27	135	243	27	405	45	675	45	567	567	405	27	27	81	81	45		27	243		9	9
63	63	27 81	1	9	9	243 45			405 567	405 567		27	27	81	189	81 135 27	45	27 9 27	27 9 27	9	45 9 27
	ļ													_							9
9													9					1			
3	15	27	3	45	5	75	5	63	63	45	3	3	9	9	5	21	3	27	15	2	5
7	7	3	3	2	2	27 5	27 5	9	45	45 63	-	3	3	9	21	15 3	5	2	2	2	2
		1						1		İ									1		2

	VI											VH							
	a	b	c	d i	6,	f	g	} _t	i	j l	k	a	bi	_ (.	d	е	f	g	h
1	15	9	3	15	9	45	5	9	9	9	9		- 1	1					
		3		3	45	5	5	- }		İ	1	15	91	3	15	9	5	45	9
1	3	9	15	9	9	63	63	9	45	3	27			- 1	-		135	135	45
i	1	15	1		27	3	3	45	9	5	45	3	15	5	3	45	3	3	
ĺ.				3	27	27	27	9				i				27	27	27	9

only serves to enrich the aesthetic effect of the tune. The tune, however, may be sung and aesthetically enjoyed without any accompaniment. The case is the same with Schubert's tune and accompaniment. This accompaniment, though incomparably richer than a drone bass, is not intended to have a separate existence. The case is different with a canon; here every voice has as much right to separate existence as every other voice, since there is only one tune in different phases. In the piece of Schütz none of the several voices has a right to separate existence; they all sound more or less poor when separated from the rest. We may say that the latter piece is one single melody compressed so that four or five tones sound simultaneously, but compressed in such a manner that these simultaneous tones, the harmonies, possess as close relationships and as high a degree of consonance as possible.

The accompaniment in Schubert's song serves three purposes. The first is a general one. The addition of the accompanying tones enriches the tune by increasing the number of relationships and adding the new element of consonance in various degrees. The two other purposes are more special. A certain tone in the accompaniment often increases the psychological effect of the same (or a closely related) tone in a preceding or following chord ¹ in these ways: it either causes the hearer to recall this tone; or it prepares the hearer for this tone when it appears in a later chord.

The song begins with the highly consonant chords 2-5 and 2-3. In I f follows a dissonant chord 2-21 without any relationship. But 21 is melodically prepared for by the preceding 3. The tension caused by the lack of relationship between 21 and 2 is dissolved in g by replacing 2 by the related tone 9. The chord g

¹ By "chord" I mean simply a plurality of (simultaneous) tones, two, three, four, or more. The restriction of the term to triads, which is common among musicians, cannot be psychologically justified. That triads, especially the triad 2-3-5, are particularly important in music, is a matter of course, if we admit that the aesthetic effect of a chord depends upon the variety of relationships, a high degree of the relationships, and a high degree of consonance.

is in smallest numbers 9, 3, 7; 7 as well as 9 are related to 3, though not related to each other. In I we have the chord 3-9-21-9 (i. e., 2-3-7-3). This 21 prepares us for the 21 sung by the voice in n. The chord m is a dissonant chord without relationship. But 5 as well as 21 is closely related to the tones in 1 and n. I cannot, of course, describe every chord in detail. The reader can easily see from the table, how the composer has combined the various elementary aesthetic effects in order to produce the highest beauty. I shall only point out a few of the most interesting cases. The voice in II is a melody without a tonic. Yet it is well connected with the other parts of the voice, not only by the relationship of the melody, but also by the primary tonic 2 (of the parts I-V) being strongly emphasized in the accompaniment of II. III j is very consonant and has a relationship of the first degree. K, the last chord of this part, is less consonant. So is the first chord of IV. IV b is still less consonant and even without relationship, but it is melodically connected with the preceding chords through the close relationships of 3-15=2-5 and 7-7=2-2. The highly consonant chord IV d causes some solution of the tension, but only temporarily; the following chords are again rather dissonant and possess remote or no relationships. This part ends in m, in a manner similar to its beginning, with a combination of 3 and 7. In V b the 7 appears again without relationship with the simultaneous 9. The 21 in V c is related to 9 as well as to 7, but not to the simultaneous 5. In d we meet a chord of close relationships and a high degree of consonance. The 21 in this chord is well prepared for by the 21 in c and the 7 in b. VI contains a very interesting chord in f. 27-63-45 is in smaller numbers 3-7-5. The relationships which connect f with e are easily determined. VII f and g are quite interesting with regard to the 135, which leads to the 45 in the last chord through its relationship 135-45= 3-2.

5. WAGNER

I shall now describe what seems to me the most perfect intonation of Wagner's duet in *Tristan and Isolde*. Since the whole duet is too long, a few selected measures must suffice to show that there is absolutely no necessity of assuming that music like this must be played and sung in tempered intonation. The numbers represent the measures 66 to 76 of Act II, scene 2, in Bülow's piano edition (Breitkopf and Hartel). The first line represents the soprano, the second line the tenor. The chord I a is not very

1! 4! 7!	5 5 . 5 135 15 2: 5 25 . 5 5 .	25 225 15 135 	15 225 225 	25 25 25 75 75	e d e 45
	11 f g h 15 15 15 15 135 45	45 45 5 225 15 135 25 5	.		
	15 15 27	27 27 27 27 27 27	7 3 3 3	V b с d в	
9 15 27 3 15 3 9	1 3 3	9 9 9 5 75 9 135 6 3 35 9 9 45 3	3 15 27 3 5 45	27 2	9 135 135 9
VI				VII	
9 9 3.	e f g	h i j k 9 9 15		5 45 45 27 2	e f g h i j 27 25 25 25 15 15 35 ₁ 15 15 15 25 25
9 15 27 3 15 3 9 9	3 9 75 45	5,75 9,135	2 4	7	9 21 5 75 75 5 15
3 3 3	3 15 15 135	135 9 9 45	3 15,15,15	9 .	. 9

VIII	1X	X
abedefs	g hijabe de	fg h i jab c d e
63 63 63 27 27 9	9 9 15 15 81	[
3 45 81 81 45 27	3,45 45 3 15 27 405 405 27	15 27 405 405,27 15 27 405 405,27
63		

consonant, nor does it possess very close relationships only; some tones are not related at all. In I b the tone 135 is replaced by 15 (relationship 9-2). The chord b contains only the tones 5, 15, and 25 and is very consonant. In the following chords more and less consonance alternates. This is also the case in II. That the first chord of II and the last of I are bound together by rather close relationships, is seen at a glance. The chord II c would be very consonant if instead of 225 the 15 of the preceding chord b had been retained. However, Wagner's contempt for consonance is here clearly seen. The variety of relationships is much higher valued by him than a high degree of consonance. The same fact may be seen in the following measures again and again. It is so conspicuous that it would be tiresome to point it out each time. The tenor in II is melodically connected with the soprano by the close relationships 25-75=2-3 and 45-75=3-5. In IV the soprano again replaces the tenor; the melodic connection is again very close. Very close are the relationships in the successive tones of the accompaniment. Very close are for the most part the relationships of the simultaneous tones in the several chords. A variety of melodic relationships was sought after by the composer even at the expense of consonance. The latter is only of secondary importance for this composer.

One wonders after such a structural analysis how it is possible for a theorist to assert that nothing but "strictly tempered intonation" could be bearable in this piece of music. The chord VIII b is composed of 9, 27, 45, 63, or in smaller numbers 2, 3, 5, 7; why should this chord be replaced by one in tempered intonation?

I can not see any reason for this. And why should all the other chords and melodic successions of tones be replaced by tempered chords and successions of intervals of equally tempered twelfths of an octave?

6. THE LEADING CHORD

It is natural that music often closes with a chord composed of the tones 2, 3, and 5, since the relationships of these tones are close and the degree of consonance high. This chord is very often preceded by the chord 3-9-15. This succession of the chords 3-9-15 and 2-3-5 at the end of a piece of music is aesthetically very effective. The musicians have invented a special name for the chord 3-9-15 in such a case. They call it the "leading chord." How can this name be psychologically justified?

Helmholtz offers the following explanation of the particular aesthetic effect of the leading chord. The tones d, g, and b, in a melody ending with c, are according to his theory "the most distant tones," i. e., tones which have a very remote relationship to the tone c. This, he thinks, makes it perfectly clear why the leading chord "leads" most naturally to the final chord. Yet this is no scientific explanation by any means. A scientific explanation is the reduction of a special case to a general law. Now, is there any general psychological law according to which special sensations "lead" most naturally to other sensations if their relationship is as remote as possible? Helmholtz does not mention such a general law. I have not found any and have never heard of any.

The aesthetic effect of the leading chord is most easily understood from our theory, without any accessory hypothesis. The most important tone of the final chord is 2. This tone has been heard repeatedly in the melody. If we sound in the leading chord any of the tones 3, 5, 7, 9, and 15, we strengthen the desire to end with 2, and this desire is fulfilled in the final chord. However, if

we wish the leading chord to contain no tone not related to every other tone, we must omit 7, which is not related to either 9 or 15. Further, if we wish to hear only relationships of the first degree, we must omit 5, which has a relationship of the third degree with 9. The triad 3-9-15, which then remains, does not only "lead" to 2, but contains relationships of the first degree only and is also very consonant. Moreover, the tones 3, 9, and 15 do not only lead to 2, but to 3 and 5 also, if the final chord contains these tones. The relationships leading to 3 and 5 are 9-3=3-2, 15-3=5-2, and 15-5=3-2. No wonder that the tones 3, 9, and 15 are so commonly used in the "leading chord."

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ORIGIN OF THE COVENANT VIVIEN

ву

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Professor of Romance Languages

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DEDICATED TO THE CLASS IN OLD FRENCH 1901-1902



ORIGIN OF THE COVENANT VIVIEN

CHAPTER I

GENERAL REMARKS, DIFFICULTIES OF THE POEM

The Covenant Vivien—Vivien's Vow—is a poem having its origin in the heroic period of the Old French epic, although the redaction which has come down to us is not placed further back than the last third of the twelfth century. The earlier critics all considered Aliscans as considerably older than the Covenant Vivien; there has been manifested lately a tendency to assign the two poems to about the same time, with the balance of antiquity inclining slightly in favor of Aliscans.

The Covenant Vivien exists in eight manuscripts, six of which are preserved in France, one at the British Museum, and one, announced a few years ago by Rajna, in the Trivulziana Library at Milan. Five of these manuscripts are of the thirteenth century, the others of the fourteenth. The poem is written in assonance, with here and there a slight trace of rhyme. In only one manuscript, that of Boulogne, are the laisses terminated by the celebrated petit vers, so characteristic of the geste de Guillaume. The number of lines in the poem is a little over nineteen hundred; in other words, this is one of the shortest of French epics.

As to the literary merit of the *Covenant*, there is no small diversity of opinion. M. L. Gautier considers this the most beautiful of all the poems of the cycle.¹ In his opinion, it is the most

¹ Epopies Françaises, iv. p. 438; ct. G. Paris, Manuel, paragraph 40.

primitive in tone. To give an idea of the beauties of the epic, he says, one would have to translate it entire. M. Jeanroy, on the other hand, has shown himself the most severe of all the critics of the Covenant.² Without denying that the poem contains a number of scenes of rare excellence, he declares that these scenes are submerged in a sea of contradictions and absurdities. There is, according to him, vagueness and uncertainty in the action, confusion in the personages, visible imitation of other models in the characters and events. He objects to the pious homilies of Vivien, and thinks them drawn from the recital of Turpin. He censures the vow, which serves as the theme of the whole epic, and blames the poet for not recounting the death of the hero, after having so long prepared us for this catastrophe. Philip August Becker, in a work which appeared shortly before the above criticism by Jeanroy, mentions several inconsistencies in the Covenant, and finds the poem entirely too vague.3

We have observed that in judging the literary merits of this poem, the appreciation rendered depends, to an unusual degree, on the point of view of the critic. Perhaps this statement contains a limited censure of the poem. In spite of some defects, for one just beginning the study of Old French, no poem is preferable to this. The action is epic in nature, easy to follow. The language is unusually simple and clear, the number of obscure passages small. No student with the least spark of imagination could fail to be impressed by the sequence of tragic scenes, nor would the vagueness of the ending be without its charm, but would leave in the reader an ardent desire to follow the *Covenant* with the more famous *Aliscans*. Indeed, so admirably does this poem suit beginners, that we are convinced that a good reading edition of it is

² Romania, xxvi, pp. 180-188. This article ranks with the two or three best studies that have appeared concerning the legend of Orange.

³ Alto on rosis h. Wilhelmsage, Halle, 1896.

the greatest pedagogical need of our students of Old French.⁴ That the poem should produce a less favorable impression on those already masters in the subject, whose minds are distracted by the evidence of literary cabinet-making, and by the eternal question of sources, is not to be wondered at. To such a scholar, every inconsistency becomes apparent, every probable imitation of earlier epics a blemish.

The events of the Covenant Vivien are as follows: 5 Vivien. who has been tenderly taken care of by his uncle, Guillaume, and his aunt, Guibor, is to be dubbed knight at Easter time. On the occasion of receiving the sword from his uncle's hand, he makes a vow never to retreat a single step from the Saracens if he have on his armor. Guillaume tries to dissuade him from so rash a vow, but in vain. He gathers together an army of ten thousand men, and in company with several of his cousins, sets out for Spain, where he successfully wages war for seven years. Nor is it a gentle war! He issues orders that no quarter be given. Men, children and women alike are slaughtered. Finally, he sends to the Emir Desramé, at Cordova, a ship-load of maimed Saracens, five hundred in number. Four men alone are left uninjured to sail the ship. The others have had their lips, nose, hands, or feet cut off, and most of them have been blinded. Desramé swears vengeance, and amasses an immense army. Vivien has time to retreat and to send word to his uncle for reinforcements, but he scorns to do either. The battle is joined under conditions hopeless for Vivien. He finally succeeds in cutting his way with a few hundred men to an abandoned castle, where they take refuge. He now consents to send a messenger to his uncle. The messenger

⁴The only printed edition of the *Covenant* is that of Jonckbloet, Guillaume d'Orange, Chansons de Geste, at the Hague, 1854, 2 vols. This edition is very rare, indeed almost unfindable.

⁵ An account of the events of this poem is to be found in the Manuscrits François of G. Paris, 1840, vol. III, pp. 140-147, and in the Histoire Littéraire de la France, vol. XXII, pp. 507-511, date 1852.

rides all the way to Orange. Guillaume is able to amass an army, thanks to a treasure which his wife, Guibor, has in reserve. He sets off by forced marches. Vivien's young brother, Guichardet, had been refused permission to accompany the expedition. He starts secretly on horseback, but consents to return to Orange on the promise that his aunt will dub him knight. This is carried out, and he departs armed. After an adventure in which he shows his courage against odds, he overtakes the army, and is given permission to continue. Shortly before the arrival of the relieving army, Vivien sallies forth for shame lest his uncle should find him taking refuge in a fortified place. He is already wounded, and feels that he must die. He performs the usual deeds of prowess which fall to the lot of a hero, and encourages his men with thoughts of the service they are rendering the God of the Christians: "In Paradise God awaits us! I hear his angels singing above us! God! why may I not die at once, and pass to that joy for which I so long!" Guillaume has heard the noise of battle, and advances rapidly, accompanied by his nephew, Bertran, a warrior of great experience and courage. They divide their forces in an effort to cut through to where Vivien evidently is. They succeed finally in reaching the spot. Vivien is wounded fatally in many places. His eyes are suffused with blood; he meets his uncle without recognizing him, and strikes him a terrible blow. Guillaume thinks that he has to do with a Saracen, but before striking he says: "By God! pagan! never since the day when Charlemagne gave me my first arms have I felt such a blow! But if it please God it shall be paid for!" Vivien cries: "Hold, vassal, where you are! I cannot see you, may God see you! 6 But since you have mentioned Charlemagne, I know that you were born in France, and I conjure you to tell me your name!" Guillaume tells who he is, and Vivien, whose entrails are already drag-

⁶The words of this line are admirable in the Old French: "Je ne vos voi, voie vos Damedé!" (1810.)

ging upon his saddle, falls to the ground in a faint. Guillaume dismounts. Vivien comes to, and insists that his uncle bind his entrails close, lift him to the saddle, place the reins in his hand, and let him continue the fight. His uncle is forced to obey. They thus re-enter the battle, which is going against them. In a little while they become separated. Soon thereafter Guillaume and Bertran meet. They are almost the only survivors. "Let us not be discouraged!" says Bertran. "Come ride with me! You strike on one side and I on the other, that our lineage may never blush for us, and that the glory of this day may be known in all France!" The poem closes with the disappearance of these two riding side by side among the Saracens, a scene of truly epic power!

The rapidity of narration in this poem is made apparent when one reflects that by line sixty the scene of action is already transferred to Spain, and that the total poem includes, in the printed edition of Jonckbloet, only nineteen hundred and eighteen lines.

It is the purpose of this brief study to examine into the inconsistencies of the poem—for it has many—and to try to explain them by a theory which will make clear the genesis of the poem.

The following inconsistencies and difficulties have been mentioned by Mr. Becker, in his Altfranzösische Wilhelmsage, 1919, 43, 44:

- I. Vivien, we are told, has waged war for seven years in Spain, yet the Emir at the close of this period rejoices because there is peace with the family of Guillaume: lines 62-69, and 96-98, 137-142, 151-160, 168-175.
- 2. Vivien awaits the attack of the enemy without taking any precautions, such as informing his uncle (358-416, 673-684).
- 3. The poet's topography is not clear. The field of battle, especially, can be explained only with the help of that in *Aliscans*.
- 4. It is difficult to understand Guibor's surprise at Guillaume's defeat as related in *Aliscans* (1803-1849), if, as in the

Covenant, Girart the messenger had so recently come to announce Vivien's fearful danger (see Covenant 1054-1116).

M. Jeanroy also complains of the vagueness of the topography of the poem. The scene of the action, he says, is given as near the sea, yet this proximity serves little purpose in the succession of events. And the place "Archant" or "Larchant,"—no one has ever been able to identify this name with any spot in the neighborhood of Arles. Indeed, the confusion between this mysterious word and the name "Aliscans" is nowhere more complete than here. If the scene is near Arles—it is M. Jeanroy who speaks—why have we no mention of the Rhone, which is certainly not a neglectable quantity in a battlefield? What are we to think of the ancient castle in the poem, which seems put there expressly for Vivien?

M. Jeanroy mentions the following inconsistencies not noted by the German critic:

5. There is confusion in the enumeration of the companions of Vivien. Certain heroes are said at the commencement of the poem to set out with him who are later found to be at Orange. Compare the lists in lines 57-60 with the passages where companions of Vivien and those who come to his rescue are mentioned, such as: 336-339, 379, 385, 519, 536, 572, 740-742, 1144-1145, 1397-1398, 1427, 1507-1509, 1543-1545, 1622, 1746-1749. It will be found on a careful examination of these passages that at least three of these heroes, Bertran, Hunaut, and Gautier, are said to be members of Vivien's expedition, and yet come later with Guillaume and the army of relief.8 The contradiction for two of these names can be seen most flagrantly by comparing lines 1144-1145 with lines 1397-1398 (Gautier le Tolosan, it is to be noted, appears to be the same as Gautier de Termes).

⁷ Romania, l. c., 182; cf. 194.

⁸ The question is still farther complicated by the statement that in the army of relief: "vii conte furent, trestuit d'un parenté." (1219.) Cf. also 1738.

- 6. After the arrival of the messenger, Girart, announcing the plight of Vivien, Guillaume is represented as sending into many lands to recruit an army (1128-1142). All of this requires so much time that we can with difficulty believe that Vivien can hold out.
- 7. If Guibor had such a large sum of money, asks M. Jeanroy, how did it happen that she had not long since placed it at Guillaume's disposal?
- 8. M. Jeanroy complains 9 that the author of the Covenant—if we may suppose the whole poem to be the work of one hand—has made too little use of the vow (the covenant) of the opening lines; that the vow occupies a place too small and too inadequate. He contrasts the admirable service rendered by the vow in the development of the action in Aliscans: Vivien, horrified for a moment at the aspect of certain hideous adversaries, starts to retreat. It is in his anger at having thus, for an instant, forgotten his covenant, that he hurls himself among the enemy, and seeks and finds death. From this heroic fault he desires absolution, and this is the only sin he can remember in his dying confession.
- 9. We are told that no sooner have Vivien and his men taken refuge in the castle, than they begin killing their horses for food. This is supposed to be a trait of a prolonged siege, and seems out of place here (781-784).
- 10. The presence of this castle, as if put here to serve as a refuge for the hero, is suspicious.
- They have sent for aid, and if they had waited a few hours longer, it would have arrived in time. We see them, none the less, rush out of their fastness as if expressly to seek destruction (1328-1337).
 - 12. We are both pained and surprised that Guillaume and

⁸ Romania, L. . . 187; ct. 195.

¹ Romania, L. c., 188; 11, 195.

Vivien become separated after they have at last come together (1885-1895).

13. It is surprising that the death of Vivien, for which we have so long been prepared, is not related in the poem. The last mention of the hero is in lines 1894, 1895, where we are told of Guillaume that he soon loses sight of Vivien, and will not see him again until he finds him dying. The scene of this last meeting is reserved for the longer epic, *Aliscans*, to which the *Covenant*, in the opinion of the critics, is the introduction.

It is evident that, while some of the above inconsistencies are relatively unimportant, others constitute difficulties of the most serious nature. The mere presence of these greater inconsistencies is proof to the experienced critic that the poem in question is derived from mixed sources, for no poet with the genius to compose the really masterful scenes in this epic could have had a mind so ill-ordered and disproportioned as to conceive an action showing such lack of unity and reasonableness. Without stopping longer, however, to discuss this point, let us mention a few other contradictions and difficulties in the *Covenant Vivien*, for the above list does not exhaust the number.

- 14. We have already seen that Vivien's vow was not to retreat a single foot before the Saracens, and that the fact of this vow serves to make possible one of the most beautiful scenes in the related epic, Aliscans. We are surprised, therefore, to read in lines 503-505 of the Covenant, that the Saracens drive back Vivien's men—with whom he of course is—more than two bow shots. Similarly, if we may judge by the context, the words: En son retret, in line 1474, can only mean retreat in the sense of retiring before the enemy.
- 15. In two passages, we read of Vivien: Filz fu Garin (123, 143-144), whereas, in line 1833, he says of himself: Filz sui Garin. If we interpret these passages according to the usual sense of these words, the first two imply that Garin is dead, the last that he is living.

- 16. In the lines 833-842, we learn that Vivien finds himself in a serious danger besieged by the enemy, and threatened with famine. He asks whether among his men there is not one who will dare to try to go to his uncle, Guillaume, who is at "Bordelois," or at Orange. The messenger really goes to the latter city, and that without hesitation, and finds Guillaume there (951, 958, 961). We cannot help being somewhat surprised at the apparently useless mention of "Bordelois."
- 17. In the passage 833-842 just mentioned, Vivien says that his uncle is at one of the above cities

A son barnage que il a assemblé.

When later, however, the messenger arrives at Orange, he finds that Guillaume has no army ready (1115-1125). This appears to be a clear contradiction.

- 18. When Guillaume is about to set out to relieve Vivien, the poet states of him that he will undergo a horrible danger within four days. Indeed, line 1223 states that he will be in mortal danger that very day, i. e., the day of his departure. Again, we read of Guichardet, who sets out to overtake the army, that he had gone only a short distance when he met some Saracens who were sentinels of the hostile vanguard: n'ot gaires allé, etc. From these passages, it is apparent that the army of relief is supposed to go from Orange to the scene of battle in from one to four days. This of course is impossible, for the scene of battle is in Spain.¹¹
- of relief, he says to his men: "I hear a great noise towards Orange! I believe that it is Guillaume!" (1455-1457). His men answer: "We see the lances appearing towards Orange! It is probably the rearguard of the Saracen army. We are lost!" No mention has been made of the Saracens having been at Orange. On the contrary, they have just landed from a fleet (345).

¹¹ Cf. Romania, l. c., p. 188, note 2.

20. In lines 1850-1856, Vivien says that if his uncle will place him on horseback, put the bridle in his hands, and guide him into the thick of the Saracens, if he does not succeed in his efforts to vanquish the best of them,

Ainz ne fui niés Aymeri ne Guillelme.

Inasmuch as Aymeri was his grandfather and Guillaume his uncle, this line does not seem to go on all fours.

Among these difficulties, 2 and 7 amount to nothing; the same is true of a part of the objections made in 3; one may well consider 8 a matter of opinion; indeed, the majority here will probably differ from M. Jeanroy. Difficulty 16 seems unimportant. Number 4 is based on a comparison with external evidence, and might be barred in this brief examination.¹² If we were to take into account also the external or cyclic inconsistencies, this study would assume proportions too vast for a single article. It must be admitted, however, that no theory can ever explain fully the origin of the *Covenant* which does not reconcile all the difficulties, external as well as internal, created by the poem.

Very little attempt has been made by the critics to explain the above-mentioned difficulties of the *Covenant Vivien*. The critics have been busied rather in determining the position of the poem in the cycle, its relation to poems that have disappeared, and to others that still exist. The opinions of the critics, none the less, have such an intimate bearing on the poem that it would be unwise to proceed further without retracing, briefly, the history of the criticisms published concerning our poem.

¹² Of the same category is the difficulty mentioned by Jonekbloet. Guillaume d'Orange, vol. II, p. 55.

CHAPTER II

PREVIOUS THEORIES WITH REGARD TO THE COVENANT VIVIEN

M. Jonckbloet, the editor of the Covenant, thinks that when the memory of the events celebrated in the opening lines of Aliscans had become dim, the need was felt of an introduction to these events, and that, in this way, the Covenant came into existence. The poem, therefore, is less ancient, in his opinion, than Aliscans. He notes several apparent imitations of other chansons de geste, and says in this connection that the dimmed sight of the hero, imitated from the Roland, fits in rather awkwardly, since, in the longer epic, as an introduction to which the Covenant was written, no evidence appears of this troubled vision.

Guessard and Montaiglon,¹³ in their edition of *Aliscans*, offer no discussion of the origin of the *Covenant*, apparently not seeing the importance of this subject for a correct understanding of the greater epic.

Gautier ¹⁴ does not attempt to treat the formation of the poem. Far from seeing any valuable external evidence in the *Nerbonesi* the discoverer of the Italian compilation mistakes utterly the portion of Andrea's account which has to do with the events of the *Covenant*. Nor is he the last critic to make this blunder.

G. Paris, in his Littérature Française au Moyen Age. 15 40, says that an ancient poem, probably in Provençal, recounted a defeat suffered by the Christians near Arles, defeat in which a hero called Vivien or Vézien, met death; that the French poets

I' In the Anciens Poites de la France, vol. X, Paris, 1870.

¹⁴ Les Epopées, vol. IV, pp. 437 ss. We shall speak later of the Nerbonesi.

[&]quot;Generally referred to as the Manuel.

made of him a nephew of Guillaume by a sister, and attributed to Guillaume a considerable part in the battle; that this action is the subject of the beautiful poem, the *Covenant Vivien*; and that two continuations to this poem were written: *Aliscans*, and *Foucon de Candie*.

Ph. Aug. Becker, one of the most original of modern critics in all that relates to the cycle of Guillaume, devotes a short space to the subject of the origin and place of our poem in his Altfranzösische Wilhelmsage, 16 pp. 43 ss. He says that the relation of the Covenant, 17 Aliscans, Foucon de Candie, and the Enfances Vivien18 to each other constitutes a difficult problem; that it is apparent at a glance that the Covenant forms the centre of the group, while the second and the third epics form a continuation, and the lastnamed an introduction,19 that the four poems may well have been composed in the order named, only that a more ancient poem served as a basis for the Covenant. One who read Aliscans, he declares, without having read the Covenant, would never conceive the precedent events as this latter poem gives them.²⁰ If we are to draw a conclusion concerning the earlier epic that served as a basis for the Covenant, we may assert that the primitive source, from which all three related poems are derived, sang only of Guillaume, Garin, Vivien, Guischart, Guielin, and Guion. In other words, this poem did not present Bertran, nor Girart, nor Gaudin. If, continues the critic, we endeavor to discern from the common features of Aliscans, Foucon, and the Enfances the events of a primitive central poem, we shall have a source that differs notably

¹⁶ Halle, 1896.

¹⁷ In common with some other critics, he calls the *Covenant Vivien* the *Chevalerie Vivien*.

¹⁸ Enfances Vivien, edited by Wahlund and Feilitzen, Upsala and Paris, 1895.

¹⁹ Cf. the opinion of G. Paris, Manuel, 40.

²⁰ P. 44. This is one of the truest and most valuable remarks of the critic.

from the *Covenant*. The theme of the conjectured poem was a defeat of the Christian arms in a battle in the Archant, where Garin and Vivien perished, where Guischart, Guion, and Guielin were taken prisoner, and where Guillaume fled.²¹ Are we, he asks, to consider the *Covenant* as a *rifacimento* of the lost primitive source, or as a later addition, constructed to fill up the gap caused by the disappearance of the central poem? The latter explanation seems to him the correct one, and, like Jonckbloet, he regards the *Covenant* as an introduction to *Aliscans*, a poem written to throw light on the somewhat confused events of the latter epic. In other words, the *Covenant* explains Vivien's vow, and the attack of the Saracens, thus paving the way for the events that open *Aliscans*.

By far the most valuable discussion of the sources of our poem is that of M. Jeanroy,²² in the *Romania*. The author states that the *Covenant* is the central poem of the three,—that the *Enfances* serve as its introduction, *Aliscans* as its conclusion, but that it is the most recent of the three. He considers that certain episodes and events of the *Covenant* are derived from the *Enfances*, contrary to the opinion of M. Nordfelt.²³ He cites in this connection the placing of the scene of the action in Spain, which, he says, was taken from the *Enfances*, and only serves to embarrass the author later, when he has to transport the action to "Aliscans," which, in the mind of M. Jeanroy, as in that of the other critics, can only mean near Arles.²⁴ Again, he sees in the killing of the horses for food in the *Covenant*, evidence that the episode was derived from the *Enfances*. We shall return later to

²¹ P. 46. It will be noted that these events are much more nearly those of *Foucon* than of either of the other two poems. Mr. Becker deserves credit for the keenness of his insight in this criticism.

²² Romania, XXVI, pp. 180 ss.

²⁷ L. c., 187; cf. Enfances Vivien, p. XXXI, or Recueil de Memoires présenté₄à G. Paris, Stockholm, 1889, p. 95.

²⁴ P. 181, note 1; cf. 185 at bottom.

these points, as to several others, in which it seems to us that the critics are mistaken. M. Jeanroy closes his preliminary examination of the sources of the *Covenant* by asserting that, to obtain some idea of the primitive epic whose place the *Covenant* occupies, we must address ourselves to the *Enfances*, to *Aliscans*, to *Foucon*, or to some one of the foreign imitations or translations of the legend represented by the events of the *Covenant*.²⁵

Leaving the Willehalm of Wolfram von Eschenbach, which appears to be a mere translation of Aliscans, M. Jeanroy turns his attention to the Roman d' Arles 26 and to the Nerbonesi. He believes that the authors of these two works must have been inspired by a poem materially different from the present Aliscans, especially in what concerns the battle and Vivien's death. He classes as primitive any episode which occurs in the two works. He places the name Galice in this category, and the chateau, which has already been mentioned. He is the more ready to accept this chateau as belonging to the lost primitive epic, because the name given it by Andrea da Barberino, Monte Argiento, suggests an explanation of the mysterious word "Archant," which has so puzzled two generations of scholars.²⁷

As for the data concerning the lost poem to be derived from existing epics, M. Jeanroy finds little or nothing in the *Enfances* beyond two points which he has already mentioned.²⁸ Aliscans

²⁵ Pp. 188 ss. Page 193 constitutes one of the most admirable pages of contemporary criticism on this subject.

²⁶ Published by C. Chabaneau, in the Revue des Langues Romanes, 1888.

²⁷ L. c., 195. To treat bibliographically this word and the word Aliscans, would require considerable space.

²⁸ L. c., 181, note 1, 185, 187, 194, 195. We gather the idea that M. Jeanroy opposes the opinion of Nordfelt, namely: that the author of the Enfances knew the Covenant, yet, in the note on p. 206, we find M. J. predicating an influence of the Covenant on the author of the Enfances, nor does he make here the reservation (as on p. 187) that the author of the Enfances may have drawn from the Covenant primitif.

to be sure, retraces somewhat the precedent events, but, inasmuch as the purpose is to modify the original source, one cannot trust to this retrospective information.²⁹ In the matter of Vivien's communion as recounted in *Aliscans*, he finds that this may have existed, at least in germ, in the lost original replaced by the *Covenant*, for here a passage in the *Nerbonesi* offers corroborative evidence. As to the *Foucon*, M. Jeanroy is of the opinion that, in giving prominence to the sons of Bovon, this poem is probably in accord with the lost source represented by the *Covenant*, ³⁰

M. Jeanroy, to sum up, believes that the *Covenant* was written to take the place of a lost primitive poem, whose disappearance left a decided gap in the legend; that the author of the new poem relied somewhat on oral tradition, and drew freely on *Aliscans*, and, to some extent, on the *Enfances* and on *Foucon*. The surest traces of the primitive epic are to be found in the foreign imitations and translations that correspond to the action of the present *Covenant*.

Ph. Aug. Becker has treated the subject of the origin of the Covenant in two other monographs, Der Südfranzösische Sagenkreis, and Der Quellenwert der Storie Nerbonesi.³¹ We shall state briefly the conclusion of these two works, where we may expect the critic not to depart far from his previously-expressed theories. On page 39 of the first of these studies, the author says that he has endeavored to descry, in the common indications of Aliscans, Foucon, and the Enfances Vivien, the character of the lost central epic, and that, in his opinion, this epic differed notably from the Covenant. He then takes issue with M. Jeanroy for his argument that one may reach the conclusion from the foreign imitations of the legend that Vivien was once sung in poems inde-

FP. 197. For another example of this reasoning, 2nd. Becker, Die alt trans. With Insuga, p. 45.

³⁰ L. c., 198, 199. Ch. Ph. Aug. Becker, in a later work of his: Der súdtran osts la Sagantires, Halle, 1898, pp. 57, 55; also pp. 25, 26.

¹ Halle, 1898.

pendent of the William-cycle. He asserts that the author of *Aliscans* was the first to raise the personage of Vivien to the sympathetic position it has since occupied.³² Both the *Enfances* and the *Covenant* were composed, he says, only after this creation of the heroic figure of Vivien; that his legend was localized at Arles.³³ At several points in his subsequent discussion, the author speaks of the lost *Stammgedicht* which he has already predicated in common with other critics.³⁴ Mr. Becker seems more and more disinclined to see primitive traits in the *Enfances* or in the *Covenant*. The author declares in unmistakable language, that, save for the lost *Stammgedicht*, he considers the existence of older redactions of the Vivien epics as unproven.³⁵

As for the Quellenwert der Storie Nerbonesi, the remarks of Mr. Becker touching the subject in hand will be clearer if we postpone them until later, when we shall come to speak of the account of Andrea da Barberino. Similarly, it will be well to put off a discussion of a dissertation by A. F. Reinhard: Die Quellen der Nerbonesi.

To sum up these opinions, the critics are agreed that the Covenant Vivien does not exist in its primitive form; that it was written to replace a lost epic that sang of a fearful defeat of the Christian arms, where Vivien, and perhaps Garin, met death, defeat in which Guillaume also took part. The poet who wrote the Covenant based his work on oral tradition concerning the primitive poem, already lost, and on Aliscans; to some extent, also, on the Enfances in a more primitive form, and on Foucon de Candie. The Covenant, was composed as an introduction to Aliscans, and perhaps to Foucon as well, while the Enfances was written to serve as an introduction to the Covenant.

³² L. c., p. 40.

³⁰ Cf. Jeanroy, l. c., p. 196, note 2, and p. 201.

³⁴ Pp. 57, 58, 73, 75, 78 of the Sagenkreis. Ct. M. Jeanroy, L. c., 193, 194, cf., by Mr. Becker, Zeitschrift f. Romanische Philologie, XXII, p. 130. ³⁵ P. 42.

CHAPTER III

TESTIMONY OF THE STORIE NERBONESI WITH REGARD TO THE COVENANT VIVIEN

It will be necessary at this point to resume, in a few paragraphs, the events of the *Nerbonesi* ³⁶ that have to do with the *Covenant*. ³⁷

Namieri (that is Aimer) left Paris for Spain after the crowning of Louis. He took with him his nephew, Vivien, who soon obtained permission from his uncle to make a foray into "Portugal." Namieri grants him ten thousand men, and urges him to return immediately with the booty. Vivien and his little army pass through Asturia, and at a point not far from the frontier of Portugal, he arrives at a river, called the Arga. On this stream is a city, Galicia by name, which he succeeds in taking.

³⁶ Edited by Isola, 2 vols., at Bologna, 1877-1888. This vast compilation appears to have been written about the year 1400, at or near Florence, by Andrea da Barberino, as his name is generally cited. The work recounts, in a sympathetic and often dramatic manner, the fortunes of the epic family of Aymeri de Narbonne. Andrea translated the book from the French, he tells us. Indeed, we have a number of other works from him, all treating epic events, and most of them coming evidently from French models. Andrea is said to have been a singing master, and to have possessed landed estates. He certainly had access to a large number of French epics, and very probably owned many manuscripts himself. Few as are the facts known about him, his personality speaks clearly in his works, and a more delightful study could hardly be proposed than an examination of the personality and literary methods of the old master. The nearest approach to this, is in Rajna's I Reali di Francia, Bologna, 1872, vol. 1, pp. 283, 330; see especially pp. 313 ss. See also article Barberino, in Répertoire des Sources Historiques du Moyen Age, by Ulysse Chevalier.

37 This recital is found in vol. I, pp. 461-518; vol. II., pp. 145-165.

He is now unable to return, being besieged by the inhabitants of the country. He succeeds in repelling and scattering his enemies, and, in preparation for a new attack, builds a castle on a peak near the city of Galicia. This castle he provides with provisions, with a garrison, and all that is necessary to sustain a siege. Some say that he swore never to abandon this castle until his death.

Vivien's expectation that he would again be assailed in Galicia was not deceived. The Saracens gathered from many lands. King Isram di Ramesse (our Desramé) sent two of his sons with an army; Tibaut, who was then besieging Orange against his arch-enemy Guillaume, sent his brother, l' Alpatrice (our l' Aupatri), with fifty thousand men. There came also, from Africa, Maltribol, a Saracen of huge stature, destined to become one of Vivien's most bitter adversaries. The siege of Galicia lasted a year. During this time, the usual feats of heroes were performed, those winning greatest glory being the Alpatrice, Maltribol, and Vivien. At the expiration of the year, Vivien held a council of war, and decided to cut his way, with the flower of his troops, to the castle called Monte Argiento. To facilitate this plan, they set fire to the city at night, and during the confusion occasioned by this among the enemy, they cut their way through the hostile camp, and, a thousand men strong, entered Monte Argiento. The remainder of Vivien's men he had urged to try to escape by a valley. A number of them did so, and thus the news of Vivien's predicament reached Namieri. The Saracens, angered that their prisoner should have found safety in the castle, surrounded it closely on all sides.

Namieri sends the news of Vivien to his uncles, but none of them comes to help. However, the two sons of Bovon, Guidone and Guicciardo, together with Guiscardo, Vivien's brother, and Guidolino, son of Arnaldo, join Namieri in an expedition to rescue the besieged hero. The army of Namieri is unable to raise the siege, but Guiscardo succeeds in penetrating into the castle, to the joy of his brother. Namieri, repulsed, returns to "Spain." The

siege of Monte Argiento drags on year after year, enlivened only by the occasional feats of arms of the contesting parties. Vivien has repeated encounters with the Alpatrice and with Maltribol.

Finally, Namieri forms another army to attempt the rescue of his nephew. He has still with him the three nephews mentioned in the first expedition. The army of Namieri is joined by his nephew, Bertran, who has gone to Paris from Orange (also besieged), and who, having slain at the court a knight opposed to the relief of Orange, has fled secretly, and arrives in Spain hoping to be able to persuade Namieri to help relieve Orange.³⁸ Counting Bertran and two sons of Namieri who take part in the expedition, there are six cousins.

This second attempt succeeds. After a severe battle, in which there are several formidable duels between the contesting leaders, the Saracens retire, a portion of them, with the Alpatrice, going to Orange in order to help on the siege of that city against Guillaume. When the victory has been won, Bertran relates the fearful pass to which Orange has been reduced by nearly seven years of siege, and everyone cries: "To Orange!"—everyone save Vivien, who does not wish to abandon Monte Argiento to the enemy. He consents to go, however, on condition that they all aid him later to conquer a realm for himself in Ragona (Aragon). Before departing, they destroy Monte Argiento, that it may not fall into the Saracens' hands. The same thing is done in the Enfances Viv., Ms. in prose, 1. 2404.

Such are the events of a poem which certainly once existed, as proven by independent testimony, and which was probably called Les Enfances Vivien. This epic, whether originally independent of the cycle of Guillaume or not, came to serve as an incidence in the longer and more famous poem, Le Siège d'Orange. All that now remains of the Siège is incorporated in Aliscans, where the place at which this incidence of the Enfances

^{*}Pp. 440-461.

Vivien was soldered on is still apparent. For ease of reference, we shall call this source (the primitive Enfances Vivien), B, reserving A for the lost Siège.

As has already been stated, Vivien's friends promised him that, the siege of Orange once raised, they would aid him to conquer the realm of Ragona in Spain and the lands of Aliscante. This promise is executed. The expedition proves successful, and Vivien is in due time installed as king of the above-mentioned countries. He has been aided by Guillaume and six cousins who took part in the events narrated under B. For convenience, we shall refer to the events of this expedition as C.

It is at this point ³⁹ that begins the action of another poem, which, according to the theory we shall develop, enters into the present *Covenant Vivien*. Here are the events of this other poem:

Vivien was at Tortosa, when he learned that Tibaut was gathering an immense army to move against him and recover the captured lands. He sent word to Guillaume of the threatened invasion, and the latter set out for Barcelona with an army of fifteen thousand men. Vivien, meantime, made ready at Tolosa to withstand the enemy. Tibaut, smarting under the wrongs inflicted by the family of Guillaume,—the loss of Guibor his wife, of Orange, and of many cities—prepared the most formidable attack that had ever been directed against any country within recent times. He brought with him twenty-two kings, including the bravest of Spain, of Africa, and of the Orient, and a number of uncrowned heroes no less formidable. Among these latter were Maltribol and the Alpatrice, old enemies of Vivien. The number of these kings and greater heroes combined appears to be thirty.

The battle is joined near Tortosa. The smaller army of Vivien is overwhelmed by the huge divisions of the Saracens. Vivien sounds the retreat, but discovers an army between him and

³⁹ Vol. II, pp. 145-165.

Tortosa. Assailed on three sides at once, the force of the Christians is soon reduced to a few thousand men. Vivien sends a pressing message to his uncle at Barcelona. His brother, Guiscardo, and his cousin, Guido, are taken prisoners. He takes position with the remnant of his army on a hill, where he hopes to be able to hold out two days or more, until aid may come. At length, however, seeing a fresh division approaching from the rear, nearly all his knights having been slain, he realizes that all is lost. We here quote from the Italian a somewhat striking passage. 40 "Quando Viviano vide venire i nimici di sopra, conobbe non avere più riparo, e ristretto con tutta sua giente, si baciarono tutti in bocca, e raccommandaronsi a Dio, e si comunicarono colla terra, l'anime loro rendendo di buono cuore a Dio, Viviano confortandogli che infino alla morte si difendessino francamente." In the mêlée that followed, Vivien and Maltribol fight, and each slays the other.41 This, then, was the end of the celebrated Vivien l'alosé, 42 also called Vivien d'Aleschans. 43 His entire band was exterminated. Tibaut showed great honor to the body of his dead foe, and had it interred in a church with Christian rites.

The messenger, Guicciardo (Girart), reached Guillaume at Barcelona. Guillaume set out before the next dawn, and, with Guicciardo as guide, rode by forced marches towards the battle-field. They rode all day and a part of the ensuing night. They started on early the following morning, and by the third hour of the day, were drawing near to the region of the struggle. However, they were destined never to reach the hill where Vivien had long since been killed, for their arrival having been announced to

⁴⁰ P. 158.

⁴¹ P. (5).

⁴² Aliscans: 684, 5306, edition Guessard; Covenant: 106, 283, 291, 827, 1821, 1894.

⁴³ Enfances Vivien, line 5, save in Ms. of Boulogne.

Tibaut, the whole Saracen force met the approaching Christians, and soon surrounded them. Guillaume was obliged to have half of the army, under Guicciardo, face in one direction, while he with the other half faced in the opposite direction. Guicciardo, unhorsed by no less an adversary then Tibaut himself, was forced to surrender, and his men were hewn to pieces.

The Saracens then threw all their divisions against Guillaume, who in a short time saw his last remaining forces perish. He then began to flee, and managed to escape through a valley. The enemy, of course, pursued him. He was obliged many times to face about and fight for his life. After a number of these duels and many hairbreadth escapes, he reached Orange, alone and wounded. The chase had lasted for eight days.⁴⁴ We shall refer to the events thus summarized, as D.

These are the pertinent events utilized, according to our theory, to combine with those of B in the formation of the present *Covenant Vivien*. The poem D thus utilized is now lost, save in so far as parts of it may be preserved in the present *Aliscans*, or in the *Covenant*. It may have borne the name of *Aliscans*. According to our theory the present *Covenant* is a blending of the sources B and D, of which the first ended favorably for the hero, the second disastrously.

Before proceeding to examine this recital of events with regard to the question in hand, it would be well to state the conclusions arrived at by Mr. Becker and Mr. Reinhard in the two works mentioned above. The first-named critic discusses the source which we are to call B, on pages 30-35 of his book. He says that in this section of his account, as in those immediately following, Andrea has treated his originals with the utmost freedom; he has drawn from them only here and there a motif, and,

⁴⁴ According to other passages, ten days: pp. 185, 195.

⁴⁶ Der Quellenwert der Storie Nerbonesi, Halle, 1898; Die Quellen der Nerbonesi, Altenburg, 1900.

indeed, occasionally he has taken two or three times the same motif; in the thread of his story, he has followed a plan of his own: namely, to present Orange and Spain side by side as the scene of the action. In doing this, he preserves, to be sure, the spirit of the cycle of Narbonne; in many ways, however, he allows himself geographical liberties and free combinations, which have no warrant in the French epics.

We remark this, first, he says, in the episode (the one we denominate B) whose hero Vivien is. This episode reposes clearly on the Covenant Vivien, yet does not prepare for the disaster of Aliscans, but is conducted parallel with the siege of Orange, and furnishes, in some measure, an explanation for the failure to relieve Guillaume, as it paves the way for his rescue. Andrea, then, has utilized the Covenant, but he has transported its scene of action to Portugal, and out of a single battle, i. e., the battle of Aliscans, has woven the history of a long campaign. Instead of the disaster which closes the French poem, he presents a victorious ending. In transporting the scene of action to Spain, Andrea may have been influenced by the Enfances Vivien.46 He has made of the "Archant" of the original, the name of a castle in which the hero takes refuge, deriving this castle evidently from the Covenant. In the manner of death which Andrea ascribes to Aimer—death from poisoned arrows—Mr. Becker sees evidence of imitation of the Mort Aymeri; in the fact that Garin, Guibert, and Aimer lose their lives at the deliverance of Orange, evidence that the author drew from Foucon, where we learn that these three are dead.

Of the source which we have called D, Mr. Becker says that the elements of this account are derived from the Covenant and from Aliscans, and are made to pave the way for Foucon de Candie. Andrea learned, from the summary at the beginning of

⁴⁶ With regard to Andrea's having known the *Enfances*, Suchier is not of the same opinion as Mr. Becker: *Les Narbonnais*, Paris, 1898, vol. II, p. XXXII, note 2, nor is Mr. Reinhard, *l. c.*, p. 84.

Foucon, that Vivien had died in a bloody battle, that Guichart, Girart, and Gui had been taken prisoners, that Guillaume had fled to Orange. He endeavors to narrate these events filling out the picture from hints in the Covenant and in Aliscans. It is almost needless to remark, says Mr. Becker, that the difference between Andrea's account and that of his sources must not be taken to indicate that he utilized other versions of those sources than what we possess. If he leaves Bertran, for instance, at Orange, it is because that is the best thing he could do with him, since, by reason of desiring to follow the recital of Foucon, he could neither make him flee with Guillaume nor be taken prisoner. The conclusion that Andrea utilized other versions of the French poems is the less tenable, because at times many traits of the originals which are not found in their place, appear elsewhere, as, for instance, the "seven cousins," who, in the Italian account, take part in the relief of Vivien and of Guillaume (i. e., in the source B), but who do not appear here as they should.

Mr. Becker sums up his conclusions at the end of his work,⁴⁷ and closes with the following remarkable statement: "We have asked the question: What worth the *Storie Nerbonesi* may have for the early history of the Old French epic? We answer: 'None!' "⁴⁸

The dissertation of Mr. Reinhard, above mentioned, is of no small value, although showing at times traces of insufficient reflection on the part of the author. Again and again his remarks show a genuine common sense, coupled with due moderation in statements made. On pages 31-33 of the dissertation will be found, in parallel columns, a summary of the events of source B,

⁴⁷ P. 50.

⁴⁵ In the Sådfran: Sagentreis, which was written as a companion piece to the present work, Mr. Becker has expressed the same opinions, although in a more moderate tone. See, for instance, pp. 10, 11, 34, note 3, 38, 39, note 3.

side by side with the portions of the *Covenant* which seem to Mr. Reinhard to correspond.

The superiority of this table over that of Gautier, 49 indicates the vast advance that has been made in the understanding of Andrea's work during the last twenty years. Gautier saw the account corresponding to the *Covenant*, in Book V. of the *Nerbonesi*, the part that tells of the conquest of Vivien, Guillaume, and others of the family of Ragona and the lands of Aliscante. Other critics are right in asserting that this part of the story of Andrea has nothing to do with the events of the *Covenant*.

On page 73 of the Quellen, the author says that Andrea's general plan forced him to make a decided change in the action of the Covenant, and, true it certainly is that the author's table does not indicate any remarkable kinship between the poem and the prose. Namieri, he says, has been fighting for a long while in Spain, hence Vivien must be brought into relations with him—just why this is, the author does not state. Inasmuch as Namieri was to betake himself to Spain after the crowning of Louis, and since Vivien was to accompany him (who decided that things had to be this way, we should like to know!), the young hero had to be knighted at the coronation feast. Vivien's vow is lacking in the Italian account, continues the critic, because such a vow has no sense in it anyway.

The long period of Vivien's stay in Portugal is due, we are told, to Andrea's desire to fill out the time until Vivien and his associates are to hurry to the relief of Orange.

In the epic, Guillaume hastens to the aid of Vivien; this is impossible in Andrea's account, for Guillaume is besieged himself. Besides, Vivien is nearer to Namieri's field of operations than to Guillaume's.

The critic shows how, in a number of cases, the action of the *Storie* is arranged more logically than that of the poem.

[&]quot; Epopers, IV., pp. 44, 45.

In common with all other critics, the author speaks of the battle that closes the *Covenant* as "the battle of Aliscans."

The events of the source D are found on pp. 35, 36 of the dissertation, and in the opposite column are placed the events of Foucon. We are surprised not to see Aliscans mentioned here instead of Foucon; the reason given is that the events in question may be joined as naturally to the one poem as to the other. Gautier considered these events as derived rather from Aliscans. Mr. Reinhard seems to be really of the same opinion, for he says in his remarks on this part of Andrea's story that the chapters in question correspond to the opening lines of Aliscans; 51

In what the critic says of the episodes of Baudus and Acchin in the *Storie*: that they are not a creation of Andrea's, but are drawn from his originals, he certainly is right.

A few words further with regard to the statements of the two critics mentioned. The arguments of Mr. Becker are little more than assertion. He says, for instance, of the events of B, that Andrea has treated his originals with great freedom. We are tempted to ask how he knows what the originals were. It will not do to assume, as he does, that these originals were the poems which still exist, and as they still exist. Again, he asserts that Andrea follows a plan of his own in presenting Orange and Spain side by side as scenes of action; that he takes constantly liberties, geographical and otherwise, with his originals; that the part of his story under discussion, although reposing evidently on the Covenant, does not prepare the way for the disaster of Aliscans; that out of a single battle, he has woven a long war; that instead of the defeat of the Covenant, he presents to us a victory. But all this is simple assertion. The impression left upon us by Mr. Becker's study, is that he began it, having decided, a priori, that the account of Andrea was worthless, as far as indicating early redactions is

¹⁰ L. c., p. 45.

⁵¹ Quellen, p. 74.

concerned. There is, to be sure, one argument in this part of the study. The author says that Andrea knew from Foucon, which was the model he was following in general, that Garin, Guibert, and Aimer were dead at the time of the action of Foucon, hence he lets them die at the battle for the deliverance of Orange. This argument, however, is not of full force, for the same passage of Foucon states that Ernaut, too, was dead. Why did Andrea not kill him also in the same battle? It may be here added, by the way, that we believe that line 5583 of Aliscans: "Querés Guillaume et Bernart et Buevon," gives correctly the names of the brothers alive at the time in question, and is undoubtedly a primitive reading.

As for the statement made that Andrea follows a plan of his own, in presenting before us constantly Orange and Spain as the scenes of action, something, too, is to be said. As a matter of fact, there is internal evidence in *Aliscans* itself to show the existence of the expedition into Spain or Portugal in the ancient sources whence *Aliscans* comes. We read in this poem (lines 2596-2603) that Aymeri and Ermengard arrive at court with four of their sons,

Mais n'i ert pas Aïmers li caitis: En Espaigne est entre les Sarasis U se combat et par nuit et par dis.

Furthermore, the relief of Orange is planned; the relieving army marches, and when its divisions appear under the walls of the city, we are amazed to see arrive Aimer. No mention has been made of his having been informed (lines 4232-4250). From a description of the men Aimer leads (4914-4920), we learn that they were very brave, but that their shields were broken and bent, their hauberes blackened with sweat, their helmets filled with dents, their swords unburnished. They had many times attacked the pagans in Spain. These men are evidently from the band of Aimer and Vivien, when these leaders marched to the relief of Orange after the release of Vivien, as narrated by Andrea. Since many of these men were probably among those so long besieged

with Vivien, their presence lends to the entire band the desperate appearance as given above. As for the informing of Aimer, this has been done by Bertran, as related by Andrea. In short, *Aliscans* still shows the stump where a bough was once lopped off, that bough being an *incidence*, the poem which we have indicated by B.

With regard to the source D, the critic says that the action here is drawn from Aliscans, the Covenant, and Foucon; that the author learned from the opening lines of Foucon that Vivien had perished in a fearful battle, that Guichart, Gui, and Girart had been taken prisoners, that Guillaume had fled for his life to Orange. These events he filled out from hints in Aliscans and the Covenant. Bertran, we are told, is represented as having been left at Orange, because according to Foucon, he neither was taken prisoner, nor fled with Guillaume, etc. These again are simple assertions. Becker himself has recognized that the primitive source on which all the poems we are discussing is based, represents the three cousins above mentioned as the prisoners.⁵² Why deny without proof that Andrea may have drawn his information from this source, as did Foucon? Again, Foucon does not say that Guillaume did not succeed in reaching Vivien. The critics agree that primitively this was the state of the legend.⁵³ Andrea so presents it, yet, not having derived this from Foucon and the two other epics, which represent Guillaume as arriving before the death of the young hero, where can Andrea have found this, save in some primitive source? As for Bertran's presence at Orange, and not on the battlefield, we have elsewhere attempted to show that this was the primitive state of the legend.⁵⁴ Another point: If Andrea had adopted the events as narrated at the beginning of Foucon, why did he not present the death with Vivien of Guerin or Garin, who is there said to have perished with Vivien? This Garin may have been Vivien's father.

[#] Alttr. Wilhelmsage, p. 46.

⁵⁸ Romania, XXVI, p. 199: Rolin, Aliscans, p. 15, note 5.

⁵⁴ Child Memorial Volume, Boston, Ginn & Co., 1896, pp. 127 ss.

If this be true, Andrea, in having him die at Orange, has followed neither *Foucon*, nor *Aliscans*, nor the *Covenant*. He could have had this hero perish as in *Foucon*, without contradicting anything in the two other epics.

Mr. Reinhard, in speaking of B, says that Andrea has altered the whole action of his recital, because his story represented Aïmer as occupying Spain as the scene of his exploits. He reasons evidently that because the *Covenant* represents Vivien as going to Spain, the Italian compiler found it well to subordinate his adventures to those of his uncle Aïmer. This suggestion, however ingenious, presupposes in Andrea a rage for rearrangement really astonishing! We are to believe that, translating originals which fitted into each other and doubtless made a symmetrical sequence of events, the translator went to the trouble of turning everything topsy-turvy to avoid sending Vivien into Spain independently of Aïmer! To make this theory at all feasible, it would be necessary to show that the author was such an ardent partisan of the glory of Aïmer, that he altered his entire story in order to rob Guillaume to the profit of his brother! On n'est pas si malin que cela!

Futhermore, if Mr. Reinhard is to be taken at his word in another passage, he subscribes to the whole version of the *Nerbonesi*. On page 119 of his excellent study, he says that the lines 4929-4931, contain a mention of Bertran.⁵⁶ This is the first link in a chain that reaches a long way. The Old French poem represents Bertran as a prisoner of the Saracens at this very moment. His presence here is in strict accord with the account of the *Nerbonesi*, and implies: I. that he was not a prisoner; 2. that he, and not Guillaume, had gone to court for aid; 3. that, in consequence, he, and not Guillaume, was the protagonist in the masterly scene

⁵⁵ The placing of these two heroes in Spain was not the invention of Andrea, but is certified to by a large number of passages in Old French.

⁵⁶ Mr. Reinhard evidently drew this citation from the *Romania*, XXVIII., p. 128.

at court; 4. that he went to Spain to bring Aimer,—in short, that the recital of Andrea is more primitive than that of *Aliscans*. In our opinion, the objections of the two critics mentioned are specious and of no value whatever.

CHAPTER IV

THEORY WITH REGARD TO THE COVENANT VIVIEN

We have seen that the Covenant contains a large number of inconsistencies which no theory thus far advanced suffices to explain. The existence of these inconsistencies indicates, in sound criticism, that the poem reposes on various sources difficult of reconciliation. For, it is inconceivable that a poet, creating this epic in its entirety, should have allowed such defects to subsist. This is above all improbable in the literature of France, which already, at the early epoch of which we treat, was conspicuous for those admirable qualities of common sense and logic that have given to it a unique position among the literatures of the world. Nothing is more characteristic of the Old French epics than their directness of style and narration, their reasonableness of plot and action. The Frenchmen of this remote period, like their descendants of to-day, aimaient à y voir clair. Then, too, these epics show conspicuous evidence of that true feeling for form and symmetry without which no literature can be of conspicuous merit. One who doubts the superiority of France in this respect in the eleventh, twelfth, and thirteenth centuries, need only compare the French originals of that time with their foreign translations and imitations. In these, he will observe a heavy and turgid mode of thought, a floundering style, a lack of feeling for form and proportion, a sentimentality, which find no warrant in the French originals, so direct, simple, and clear.

We believe that the *Covenant Vivien* is the result of the blending of two separate poems, whose subject-matter is related by Andrea da Barberino in the narrations which we have denominated B and D. This theory, be it noted, means nothing more nor less

than a justification of the Nerbonesi in all that relates to Orange and to Aimer. For, it will be noted, the events of D repose on those of B, which in turn presuppose A, the long siege of Orange, which presupposes the taking of Orange in the manner recounted by Andrea. All critics have noted, some with admiration, the symmetrical and rational enchainment of events in the story of Andrea, but no one seems seriously to have asked if the old amateur may not have found his sources as he presents them. The existing epics treating of these events have blinded the critics. They admit, indeed, for the most part, that these epics have undergone alterations, that they once presented a more primitive legend. Why is it, a priori, impossible that Andrea, a Florentine living at the close of the fourteenth and the beginning of the fifteenth century, a man of some leisure and means, passionately devoted to the epic matter of France, should have known and utilized sources now long since disappeared? It is not infrequent to find preserved in a foreign land remnants of a literature or of an art which the rapid tide of fashion and popularity has long since rendered antiquated in the mother country.

Because of the concatenation just mentioned in the story of Andrea, it is difficult to discuss isolatedly any part of his account. Desiring, for instance, to establish a connection between the *Covenant* and the sources summarized under B and D, we are at once embarrassed by the organic connection between B and D and precedent events. How can we speak of B without speaking of A? And how can we properly treat of A without treating of the *Prise d' Orange*, not to mention the *Charroi de Nimes?* Indeed, to discuss in due manner the briefest of these legends would require a volume. In the present inquiry, we shall limit ourselves to giving a brief account of A (the *Siège*), together with a glance at the subsequent events, in order to place clearly before the reader's mind one section of the vast frieze carved by the hand of Andrea da Barberino.

After Guillaume seized Orange and possessed himself of the wife of the lord of the city, Tibaut, the Saracen monarch, formed a large expedition to obtain vengeance.⁵⁷ He laid siege to the city, swearing to take it at no matter what cost of time and treasure. Guillaume defended himself as best he could. Years passed, and famine wrought havoc in Orange. At length his nephew, Bertran, who was with him, offered to go to France for aid. He succeeded in escaping, and went first to his other uncles, urging them to go to court on a given day in order to support his request for help. This programme was carried out. At first the king refused, but was persuaded by the uncles of Bertran and by the queen, Guillaume's sister. An enemy of the family of the Narbonnais, Giulimieri by name, having dared to attempt to dissuade the king, Bertran attacked him, and slew him before the eyes of all the court. Because of this, Bertran fled secretly from Paris, and hastened to Spain, to find the only one of his uncles whom he had not yet visited, Aimer. At this point is incidenced into the narration the story which we have called B: the expedition into Portugal of Vivien, who had accompanied his uncle Aimer to Spain. The events of this incidence have already been told: Vivien's departure with ten thousand men; his taking of Galicia;58 his being besieged; the siege transferred to the castle of Monte Argiento; the first attempt of Aimer to relieve his nephew; the second attempt, in which Bertran, arrived from Paris, takes part; the success of the expedition; the march of the army of relief, together with Vivien and his companions, to Orange; their share in the delivery of the city. We have also related how Vivien's friends, to persuade him to abandon his possessions in Portugal, promised to aid him to conquer the lands of Aliscante in Ragona, when Orange had been relieved; how this promise was fulfilled; how later the

⁵⁷ N., vol. I, p. 416.

⁵⁸ With regard to this word, which seems certainly to have belonged to the primitive legend of our hero, see the *Enfances Vivien*, the *Roman d'Arles: cf. Romania*, XXVI, p. 194.

Saracens under Tibaut attacked Vivien near Tortosa; ⁵⁹ how Guillaume, who had gone to Barcelona to be near in case of need, arrived too late; how Vivien was slain, his brother, Guichart, and his cousins, Gui and Girart, taken prisoner; how Guillaume, defeated in turn, fled alone from the field of battle, and was pursued clear to Orange, which was immediately besieged. For convenience, we shall call the events of the Siège, A; those of the incidence, B; those of the conquest of Ragona, C; those of the death of Vivien and the flight of Guillaume, D. According to our theory, the Covenant was formed, in the main, by the fusion of B and D.

We have elsewhere stated some of the reasons which make one believe that the siege described by Andrea is indeed the famous long siege known to have been sung formerly in an epic poem.60 This poem has disappeared, save certain parts which were incorporated in the present Aliscans. 61 The disappearance of the Siège —that is, of A—occasioned that of the incidence, B. One of the first steps in the dissolution of A was doubtless the substitution of Guillaume as messenger instead of Bertran.62 In the new poem that was rising on the ruins of A, Bertran no longer went to court as the messenger, hence the link which bound, at its beginning, B to the parent poem, A, disappeared. Bertran could no longer slay the councillor before the king, could no longer go to Spain for Aimer, and return with him and Vivien to the relief of Orange.' It is only by accident that some scribe allowed to survive the appellation of Bertran—le timonier—in the passage, transferred from A to Aliscans, where we see the mustering of the forces from France come

⁵⁹ A reference to this attack and victory is to be found in Foucon, p. 83. With regard to Tortosa, M. Jeanroy makes a mistake in his article: 1. c., p. 193.

Child Memorial Volume, pp. 135 ss.

⁶¹ Publications of the Modern Language Association of America, vol. XVI, No. 3, pp. 367-369.

⁶² Child Memorial Vol., pp. 127-150.

to relieve the beleaguered city. This passage, of the greatest value for the critic, remains to-day the most irrecusable single line in Aliscans to support the testimony of Andrea.63 By the elimination of Bertran (the link that bound the beginning of B to A), B was left hanging loose, so to speak, attached only at one end to the fragments of A, which, with other matter, were slowly shaping themselves into a new epic. Nor could B long survive, being a mere incidence, attached, and that loosely, at one end only. The events of B no longer had any intelligent bearing on the action of the new poem. Granting that those before whom the new song was sung had known anything of the adventures of Aimer and of Vivien in Spain, and of their gallant service for the relief of Orange, how could their arrival now be motivated? It would have been necessary to create a new messenger, a new machinery for the introduction of needless actors upon an already crowded stage. The branch was allowed to slough off, but we can still see the scar on the parent trunk. In what has been conserved of the ancient A in the present Aliscans, there is still fortunately visible the point at which B began, and that at which it ended; we refer to the valuable passages of Aliscans cited on page 27 of this article. As for the slaying of the king's councillor, this episode is preserved in the Enfances Vivien, 2820, where it has none too natural an air, especially in view of Bertran's tender age in this poem,—from twelve years (Ms. 1448, verse 2812), to fifteen years (see other Mss). That this episode is really the one recited in the Storie, seems more certain because of further evidence in lines 2856-2857, cf. Nerbonesi, 1, p. 461: "La vendetta del morto fu sopra a Beltramo giurata."

Once cut loose from the parent poem, the *incidence* was destined to disappear, to be fused with some other poem, or to maintain an independent existence. This last, in view of its very nature

⁶³ See *Romania*, XXVIII, p. 128, the first mention, to our knowledge, of this invaluable passage.

as indicated in the name *incidence*, could hardly happen. Nor do we believe that B disappeared, but rather that it united with the source D to form a new poem.

With D, the case was somewhat different, and, indeed, more favorable, it would seem, to conservation. In the first place, the poem in question was not an *incidence*, but had an independent existence. In the second place, it contained scenes too tragic and too profoundly popular ever to be lost. The imagination of the people was struck by the awful scenes of the fated field of Aliscans—the death of the young hero, the arrival too late of aid, the defeat of Guillaume, his solitary flight—and these scenes could not well have disappeared. It is, in general, a mistake, we think, to suppose that any considerable number of beautiful scenes was allowed to disappear from the French epic. One great law—the striving to preserve the beautiful—is observable in all the changes and disintegrations of the virile period. If any considerable number of fine scenes was lost, this was due to a deterioration in the public taste, a change which marked the close of the epoch of glory.

What inherent reasons, if any, were there for the preservation by fusion of B and D? The two poems sang the same hero; their stage of action was the same,—Spain; in both the rescue of the hero was attempted by an uncle; in both poems the hero was accompanied by a group of cousins—all of those in D playing a rôle in B. The real reason, however, is that D, destined to be preserved in some form, as we have said, because of its literary merits, required an introductory poem which should make known the young hero. Formerly, B, together with the closing passages of A, served to introduce sufficiently the hero; but with the disappearance of A, B no longer had anything to lean upon. It was left to shift for itself, and, true to its nature, turned, in the general dissolution that was coming over the cycle, to the nearest poem that seemed to be preserving its identity, to D. Yet B could not assume the position of an *incidence* to D, for the reason that the hero was

the same in the two poems. The blending of the two was the nearest approach possible to the relation of incidence to major. In this way, the public was better prepared to feel the desired sympathy and admiration for Vivien than if D had subsisted alone, supposing this to have been possible. The moment was indeed a critical one for the legend of Vivien. Originally perhaps independent, at the earliest stage at which we can catch a glimpse of this legend it was subject to that of Aimer, which was made subject in turn to that of Guillaume. It is this latter stage which is represented by the Nerbonesi. In the dissolution of the primitive cycle of Guillaume at Orange, the legend of Aimer fell into dust and was forgotten. Was the subject legend of Vivien to share in this absolute ruin? Was its union with the legend of Guillaume already sufficiently vital for some part of it, at least, to escape destruction? The answer which events brought to this question was favorable to the legend of Vivien; indeed, this legend itself may have aided powerfully to preserve portions of that of Guillaume which might otherwise have been lost. If to-day the Orange branch of the cycle of Guillaume is superior to that of the northern Guillaume, if Aliscans is superior to the Couronnement Looys, it is probably due in great part to the legend of Vivien.

Certain things in B and D seemed to render a fusion difficult. For example, B closed with a victory for the Christians, D with a fearful disaster; the uncle in B was Aimer, in D Guillaume. As for this latter point, the process of centralization had long tended doubtless to favor Guillaume at the expense of his brother. In proportion as the one supplanted the other, the scene of Vivien's exploits, which had been Spain, began to shift towards Orange, until the popular opinion of the critics to-day places the battle, in which Vivien found his death, near Orange! As for the conflict between B and D in the difference of their ending, the present Covenant bears witness to this still. Critics complain because the hero seems needlessly sacrificed; he was in a stronghold where he

had but to remain; aid was coming; all at once, most inopportunely and absurdly, he rushes out and meets death. We all feel impatience at this. A few hours longer, and all would have been well. The explanation of this difficulty in the *Covenant* is that the poem had to end with the destruction of the young hero.

Our theory that B and D were fused together can be tested by its application to the inconsistencies of the *Covenant*.

CHAPTER V

Application of Theory to Inconsistencies of Covenant Vivien

We shall now take up in their order the inconsistencies that have been mentioned at the beginning of this study.

 Vivien has waged war for seven years in Spain, yet the Emir appears to know nothing of this fact.

The seven years seem to be taken from B, where the time of Vivien's stay in "Portugal" (see *Nerbonesi* ⁶⁴ I, p. 486; cf. 484, 476, etc.), is said to have been seven years. The surprise of the Emir is at the invasion of D, which came as recounted in the *Covenant*, suddenly.

2. As we have already said, the second difficulty, mentioned by Mr. Becker, is not, properly speaking, a difficulty at all. One may feel impatience with Vivien for not informing his uncle, but one is apt to forget the yow on which Vivien's conduct is supposed to be based, which he explains to his men in lines 425-429. The device of the poem is a sufficient answer to this alleged difficulty:

Ou ci morrai, ou ci demorrai vis!

(416)

3. The vagueness of the topography of the poem. Mr. Becker asserts that the scene of the battlefield, for instance, can only be made clear to us by the help of *Aliscans*.

There is no doubt of this vagueness. The scene of *Aliscans*, however, as the above-mentioned critic recognizes in a later work,

64 For brevity's sake, we shall henceforth refer to the Nerbonesi as N.

is equally vague, 65 hence the allusion to the topographical sidelights of Aliscans is unfortunate. If we suppose the Covenant to be a blending of two different poems, whose action takes place in different sites, the vagueness mentioned need not surprise. It stands to reason, further, that, in proportion as Vivien becomes drawn into the circle of Orange and away from that of Aïmer, the confusion can only increase.

4. If Girart had so recently come to Orange to announce the predicament of Vivien, it is difficult to understand the surprise of Guibor in *Aliscans* at the tragic ending of the expedition.

In accordance with our theory, the messenger did not go originally to Orange. Vivien sent news to his uncle months ahead that the attack was being prepared, and Guillaume went with his army to Barcelona, in order to be near at hand.⁶⁶ We shall take this up again under 16 and 17.

5. The confusion in the enumeration of the cousins of Vivien. Certain cousins are said to set out with him, who, we learn later, are not with him, but at Orange.

Nothing is more confusing than the matter of the companions of our young hero. The contradiction is absolute. We believe that this confusion is due to a mingling of the lists of companions in the two separate sources, B and D. In B, there appear seven cousins besides Vivien, all of whom, save Berengier, fils d'Aïmer, appear in the *Covenant*. Three of these cousins, Gui, Girart, and Guichart, accompany the hero in D.⁶⁷ All of the French names appear in N., save Guibert de Sargoce, of whom nothing is known,

of Quellenwert, p. 42, note 3.

⁶⁶ N., vol. II, p. 146: cf. Foucon, p. 6. See our remarks later with regard to difficulty 16.

⁶⁷ These three cousins appear to have been more closely affiliated with Vivien than the others: they are among the four who accompany Aïmer in his first attempt to rescue Vivien in B: it is they who in D and in Foucon are taken prisoner, this last being now accepted by the most recent critics as the primitive state of the legend.

Gaudin le Brun, a hero of recent creation, whose presence here naturally surprises the critic, and Hunaut de Saintes.68 more natural than that the two lists should have been confused in the poem formed by uniting B and D? The most momentous result of this, has been the injection into Aliscans of a number of heroes who should have no place there, for this epic takes up the same personages whom we meet in the Covenant. Among other heroes who are brought to occupy a position not in keeping with the originals, the most important is Bertran. His appearance in the poem we are considering, is due to his presence formerly in B. Because of this, he is given as present in the new poem formed of B and D. This means that he must play a rôle in the defeat of Aliscans. Thus, by a strange alteration of the sources, this hero is made to appear and play an important part in this battle, in which originally he had no share whatever. Furthermore, in this battle, according to the sources, all the companions of Vivien who were not slain, were taken prisoner; hence Bertran, who originally was not even present in the battle, is represented as allowing himself to be taken prisoner like any novice, to be freed later by Renoart! As for the confusing number of cousins that take part in this battle, we see no other explanation than the one here outlined. The critics agree quite generally that, in the primitive source, only three cousins were taken prisoner.69 This is the testimony of Foucon de Candie,70

6. The difficulty of supposing that Vivien can hold out until his uncle can send into many lands to raise an army. We have already stated that, according to our theory, this did not take place as here given. Guillaume, warned long beforehand, had an army ready. We shall return to this later.

[&]quot;Very little is known or this hero. In the Siège de Barbastre he seems to be the son of a sister of Ermangard.

Becker, Die alttr. Wilhelmsage, p. 46.

⁷⁰ Pp. 4, 7, 13, 15, etc.

- 7. This supposed difficulty is of no importance.
- 8. Too little use is made of the vow, says M. Jeanroy. This is purely a matter of literary feeling. While acknowledging the admirable advantage drawn from the vow by the remanieur of Aliscans, 11 we do not see how the remanieur of the Covenant could well have made more use of the romantic vow than he did. Vivien mentions it several times as the guiding principle of his conduct (400-404, 416, 425-429, 478, 790, 1071-1072).
- 9. Vivien and his men kill their horses for food on arriving at the castle. This act is supposed to be indicative of a long siege. One certainly gets the impression in the poem that the time is short from the departure of the messenger until his arrival at Orange; and the return of Guillaume, his army once ready, seems to take from one to four days. The general impression is that the time passed in the castle is very short, in spite of the assertion that Guillaume sends into many countries for soldiers. If, then, the siege of the castle is brief, say the critics, the killing of the horses for food appears strange, especially if those besieged begin to kill them at once. This indication of a prolonged siege seems to us to come from the source B, where the siege of the castle lasts for several years.⁷²
- 10. The castle. The castle appears placed in the poem expressly to provide a refuge for Vivien. We learn in lines 734-735, 771, that the walls and the moat are intact, that there is a drawbridge and a cistern. In short, it seems amazing, incredible even, that the enemy should leave such a fortress undefended, within reach of the Christians. We believe that this is the castle of B, a castle constructed and garrisoned by Vivien, hence offering him an easy and safe refuge. There are indications in N. which explain some things in the passages concerning the castle. For in-

⁷¹ Romania, XXVI., p. 199.

⁷² This may be compared with the passage 2271-2277 of the Enfances.

stance, in lines 736-738, Vivien says, in proposing that they try to reach the castle:

Franc Chevalier, il est moult pres de vespre. Se la poons huimes prendre herberge, Bien nos tendrons ilueques un grant terme.

Jonckbloet, misunderstanding apparently the first of these lines, printed *Vespre* as a proper name. We read, however, in B, that Vivien and his leaders plan to set fire at night to the city where they have been besieged, and, under cover of the darkness and confusion, to cut their way to the castle near by. This is carried out. The allusion to *vespre* is thus clear, and one of the strangest passages in the *Covenant* finds an easy explanation.

11. The inopportune sortie of Vivien. This constitutes certainly one of the most serious difficulties. Probably no critic has ever read the poem without being struck with it.

We explain this difficulty by the necessity of giving a fatal termination to the expedition, since nothing else could comport with D. There are in the *Covenant* two streams quite distinct, one of victory, the other of disaster, coming, respectively, from B and D. Everyone feels that Vivien had only to remain a few hours longer in his fastness to triumph over his enemies; he rushes out, as if on purpose to die. The two streams meet most clearly and dramatically in this episode of the castle.

12. We are surprised and pained that Guillaume and his nephew are separated after they have at last come together.

This might well occasion a long discussion of the question as to whether, originally, the two heroes met at all. Suffice it to say, that, the opinion of the critics, in which we fully concur, is that they never met. The remanieur who wrote the beautiful scene of the death of Vivien in *Aliscans* is probably responsible for the legend that represents them as meeting. The meeting here is a concession to this new version, a concession all the easier because in B Vivien and his rescuer, his uncle Aimer, meet, only after some adventures of tragic interest.

13. It is surprising, says M. Jeanroy, that the death of Vivien, for which we have so long been prepared by the poet, is not recounted in the poem.

Here again, the primitive state of affairs as seen in D, has been altered with a view to *Aliscans*. The death of the hero has been transferred from D to the epic in formation, to *Aliscans*. It might, of course, have been otherwise, and if it had been, the literary symmetry of the *Covenant* would certainly have been enhanced.

14. Vivien seems to have retreated more than once without the poet's being aware that he was breaking his vow, yet in *Aliscans* his retreating the length of a lance is made the occasion of his touching confession at death.

This certainly has the air of an inadvertence. We see in this fact only evidence that the vow was not primitive, but is a later introduction, at least, as it is given in the opening lines of the Covenant. The vow in itself is undoubtedly not of the primitive epic stamp, admirable though it be as a literary motif. The sole trace of anything approaching this vow in B or D, is in B, where Vivien, according to the opinion of many, swore never to abandon Monte Argiento: "e dissono molti che Viviano guirò di nollo abbandonare insino alla sua morte."73 From this qualified statement, one who knows Andrea can only conclude that the vow did not occupy the leading position of that in the Covenant. Its importance seems no greater than that of the Enfances Vivien: see the celebrated passage (lines 2205-2217). Vivien here has just repelled an attack against the city. He calls for relics, and swears on them never to retreat half the length of a lance, nor two feet even, before the Saracens. The editors of the Enfances, and other scholars, have seen in this passage an awkward imitation of the Covenant.74 They assert that the vow never to retreat is ill-placed

⁷³ N., vol. I, p. 469.

⁷¹ Entances Vivien, p. XXVI; Romania, XXVI, p. 187.

at a moment when the hero is in such mortal danger. For our part, we are not of the opinion of the critics. The vow as given here appears to us much more likely to be primitive, and to have a more natural air, than that of the *Covenant*. A lesser hero might make such a vow at a time when danger was remote, but for the young and courageous Vivien, so *desmesuré*, this is a most fitting moment for such splendid folly, not to speak of the effect of his courage and seeming confidence on his men.

The Ms. de Boulogne announces at its close the adoubement of Vivien 4810-4823; a description of this ceremony is to be found at the end of Ms. A. M. Jeanroy is of the opinion that this description cannot be complete, for there is no mention of any vow.75 This raises the interesting question whether the vow can have existed in what M. Jeanroy calls the primitive Covenant. If there was an ancient poem recounting the enfances of our hero, the ceremony in question and the vow could not have begun this poem, because of the very meaning of the word enfances. If, however, this poem occupied the position of the present Covenant,—that is, a recital of exploits subsequent to adoubement,—it might have begun with the vow. The natural position of the ceremony, judging by parallels, would be at the close, as in the Enfances Vivien. We are inclined to believe that the adoubement took place originally at the close of the poem represented in Andrea by B, or in an equivalent position, which is the place in the present Enfances, and that there was no vow as given in the Covenant.

15. According to the words: "Filz fu Garin," Garin was dead at the moment when these words were said. When we find later, in Vivien's mouth, the statement: "Filz sui Garin," we wonder if the contradiction is accidental or real.

Following up this point, we are led to ask whether the hero's father was alive during the time of action of both B and D. He was alive in B, for he served with Vivien to deliver Orange,

⁷⁵ Romania, l. c., p. 197, note 1.

where he lost his life. Thus he was dead at the time represented by D. Unless, therefore, the employment of these expressions is purely chance, it may be asked what bearing the facts of B and D, just mentioned, would have if carried out to their full conclusion. Can it be that the first two passages come from D, although placed at the beginning of the Covenant, and that the last comes from B, although at the end? This is not altogether improbable. We have already stated that the evidence led us to think that the lines in question in the first case came from D, where the sudden invasion of Vivien, at a moment of peace, may well have surprised as here presented, the Emir (see p. 30 of this study). Again, if we apply the same reasoning to the last passage we have mentioned, it may repose on a similar one formerly existing in B or some redaction of B, at the point where Vivien and his other uncle, Aimer, or some other relative, meet in battle. Whether or not this be the explanation, the above passages have a most curious air.

16. The mention of "Bordelois."

This passage is certainly a peculiar one. Why is "Bordelois" mentioned? We have already hinted that we do not believe that the messenger went originally to Orange. Can it be that he was represented in some earlier redaction as going to "Bordelois?" We think this to be the case. In the first place, N. states that Guillaume, warned by his nephew that a formidable attack of the Saracens was imminent, gathered an army and marched to Barcelona, in order to be near at hand in case of sudden need. We are told also in Foucon of Guillaume:

De Barzelone quant il issit sousiez, De la maisnie mena o lui del miez, L. X. M. as buens helmes vergiez, Toz les ont mors piens et detranchiez, Et Vivien nous y ont mort laissiez.

(Pp. 6, 7, edition Tarbé.)

The name of the city is given in one Ms. as Bartelouze; the same Ms. spells the name Bartoloze, in a variant cited on p. 41. It seems to us conclusive that the mention of Bordelois in this passage of the Covenant is of the utmost value for the critic, and that we have here preserved evidence not to be refuted of the organic connection between D and the Covenant.

It is interesting, in connection with this passage, to examine a similar one (lines 1452-1466). Vivien thinks he hears a noise from towards Orange and draws the attention of his men to it, adding that he believes it is Guillaume. His men reply that they hear the noise and can see the lances in the direction of Orange; but that it is very probably the rear-guard of Desramé, in which case, they are lost. A few lines further on, Desramé hears the noise:

Dist Desramez: "Or oez mon semblant. Quiex genz sont ce qui ci vienent poignant; Assez est tost Tiebauz li rois poissanz, De la navie m'amaine secors grant.

(1525 1528.)

We believe these passages are taken from B, and if we are correct, nothing shows more conclusively how thoroughly the two sources, B and D, are blended. The moment seems to us to be the one in B when the relieving army of Aïmer appears, accompanied by Bertran and other cousins of Vivien. As for the substitution of Guillaume for Aïmer, we shall try to show later that this has taken place throughout the *Covenant*, save as we may hereafter qualify this statement. But what of the mention of Tibaut? We learn in N., where the events that we denominate B are recounted, that at the time when Vivien was besieged in Monte Argiento, his uncle, Guillaume, was besieged by Tibaut at Orange. Tibaut took an interest in the attack against Vivien, and had sent his brother, l'Alpatrice, with an army, to aid in his destruction. It was understood evidently that whichever Saracen army finished

⁷⁶ N., vol. 1, pp. 47 5, 171, 179.

first its campaign should hasten to the help of the other.⁷⁷ Hence Desramé thinks that Tibaut has taken Orange, and is coming to his aid against Vivien. In the last line cited above, we believe that there was originally some mention of Orange, such as: D'Orange prise instead of De la navie, although, to be sure, the latter reading could be made to fit the interpretation suggested, for the army could arrive by sea.⁷⁸

17. Vivien tells the messenger that his uncle has an army ready at Orange or at "Bordelois." When the messenger arrives, he finds that this is not so.

This contradiction is real and is most surprising. As for Vivien's statement, it evidently reposes upon the facts as given in D; namely, that his uncle has an army ready at Barcelona. How can we explain the fact that he has no army? Can it be an alteration made to heighten the influence and importance of Guibor, whose affection for Vivien, as it appears in *Aliscans*, constitutes one of the main elements of tragic feeling? We think not. The passage seems rather to be taken from the action of the poem in its ancient form, and, indeed, contains, in our opinion, evidence tending to prove that this ancient form was as in N. That is, the passage relates simply the state of Guillaume's finances and military

⁷⁷ Traces of this are probably to be seen in the following passages of the Covenant: 217-220; 546-550.

78 The question as to whether Vivien's mention of Orange in the passage 1452-1466 is from B or D would be a most interesting one to follow out. If from B, we must suppose that he knew of the siege of Orange and had reasonable hope that his uncle would rescue him. In N. there is no evidence that he knew of any siege of Orange, nor does the young hero seem filled with love for his uncle Guillaume, since it is necessary to promise him that all the Narbonnois will help him to conquer a realm to induce him to set out for the relief of Orange. Furthermore, the legend of Vivien was first attached to that of Aïmer. The further back we go in the legend, the less likely it seems that he knew or cared what took place at Orange. As for the source D, Guillaume was here at Barcelona, and not at Orange.

equipment at the moment when, as in D, the messenger came announcing that the enemies of Vivien, Tibaut at their head, were gathering to attack him. Guillaume is warned to prepare an army to march to Vivien's aid in case of need. Is there any evidence that Guillaume was really in such financial straits that Guibor was obliged to provide the wherewithal for the expedition? There is some such evidence. According to several Mss. — d, C, L—Guibor asks Guillaume, in line 1847, Aliscans, where the troops are which she entrusted him with. The reading of d, for instance, which, by the way, contains more primitive readings in our opinion than any other Ms., is as follows for this line and the one preceding:

Et li barnages de la tere des Frans, Que te baillai quant de ci fuiz tornans?

This is the *barnage* of line 841 of the *Covenant*. The conclusion seems clear that originally in D, Guillaume was unable to form an army without the help of Guibor.

This suggests the question whether in the legend of Aimer there was a female figure corresponding to Guibor in the Covenant, where her rôle is so sympathetic and effective. In the absence of sources, we can only conjecture the possibility of some such heroine, who may have served as Vivien's foster-mother. That such a woman would belong to the household of Aimer is likely, for we find in N. that Vivien appears, at the stage of his legend represented in N., attached to Aimer. Indeed, the early scene of Vivien's exploits is clearly Spain, which was also Aimer's. Under this supposition, the connection between Vivien and Guillaume and Guibor belongs to the latest stage of the legend of Vivien. As for us, we believe that Vivien, originally an independent hero, was made subject to the cycle of Aimer, and was said to be a nephew by a sister; that Aimer dubbed him knight in his palace at Termes; that with the elimination of Aimer, he was ascribed to Guillaume, and was ultimately said to be the son of Garin. If this be true, the touching and exquisite laisse in Aliscans, 767-777, Quant t'adoubai en mon palais à Termes, etc., was spoken originally by Aïmer. In fact, this laisse is the only one in Aliscans which is in assonance. Futhermore, Aïmer, according to N., had a son called Gautier, who may well be the Gautier de Termes who appears in Aliscans and in the Covenant at a point to suit the presence according to B of Aïmer's son.

This point brings up the question of the geography of the poem, and merits a much longer examination than we can devote to it here. It stands to reason, that, if the scene of the battle is in Spain, as the *Covenant* gives it, Guillaume and his army cannot ride thither in from one to four days. The testimony of *Aliscans* in this matter gives one the idea that the battlefield was near Orange. As Guillaume approaches Orange, closely pursued by the Saracens, he says of the city

A com grant joie m'en issi avant ier.

(1560.)

So apparent does it seem that the scene of Vivien's defeat is in the neighborhood of Orange, that all the critics so place it, going at times to most ridiculous lengths to discover natural objects and proper names near Orange to substantiate, as they think, the poems!

The reason for the blunders of the critics has been a failure to grasp the genesis of *Aliscans* and the related poems. When it is once seen that Vivien had Spain as the original scene of his exploits; that his legend was divorced from that of Aimer, to be linked with that of Guillaume d'Orange; that, in the great changes that came over the cycle, the fact was omitted that Guillaume went to Barcelona with an army in order to be ready to aid his nephew; that, on the contrary, he was represented as remaining in Orange until the arrival of the messenger,—it will then be clear that the geography of the *Covenant* and of *Aliscans*, as the critics have given it, is fantastical and historically wrong. Nor is evidence

lacking in various sources that supports this assertion. We have seen the *Covenant* itself declare that the battle was in Spain; in *Foucon de Candie* similarly.⁷⁹ The testimony of N. favors Spain, the *Enfances Vivien* places the hero's exploits in Spain, and certain passages mention even Galice, name known to the account of N., and also of the *Roman d'Arles*. In the testimony of *Aliscans*, there is not the slightest trace of a natural object, such as the Rhone, which might indicate the neighborhood of Orange or of Arles. Indeed, to one reading this poem in an unprejudiced way, there are many passages which would speak rather in favor of Spain.⁸⁰

To conclude this point: the remanieurs have omitted to send Guillaume to Spain with an army, that he might be ready in case of attack, and they have preserved the time-record of the original. The messenger is thus represented as riding to Orange from Spain with as much ease and despatch as to Barcelona, and, in the same way, the army of relief arrives at the scene of operations. The geographical confusion of the related ancient poems contains the key to the genesis of the poems still extant.

- 19. It has been found convenient to discuss this difficulty in connection with 16, q. v.
- 20. Vivien says that if he does not perform certain deeds of prowess, ainz ne fui nies Aymeri ne Guillelme. In spite of the extended sense of which this word nies is capable, this passage has an impossible air, inasmuch as the first person mentioned is his grandfather, the second, his uncle.

⁷⁹ We shall cite only two passages: p. 6, fourth line from the bottom; and p. 83, where Tibaut speaks of the death of Vivien in one of the most valuable passages in the entire poem:

Mais Tortelouse lor fis je comparer: De Vivien, ainsi l'oi ge nommer, Lor fis domage.

⁸⁰ For instance, the laisse commencing in line 563. The last two lines of this laisse are to be taken literally. Similarly, the word sardaingne, in line 578, a word which has not a little puzzled the ingenuity of the critics, is from Cerdaña, a region of Catalonia, in the Pyrenees.

It is our belief that Aymer instead of Aymeri stood formerly in this passage, and in many others. In the first place, it is strange that the only brother whose exploits had Spain as their theatre should be unmentioned in a poem where his nephew invades Spain, wars there for seven years, and dies there! We find mentioned in the Covenant, besides Guillaume, Hernaut, Garin, Bovon, and Guibert,—in short, all the uncles of Vivien, save Bernard and Aïmer. The legend ascribing to the last-mentioned hero the conquest of Espagne la grant is so universal, that this omission here where we should least look for it, naturally surprises us. We believe that his name was omitted designedly, and that it formerly replaced that of Aymeri in the following passages:

Forment maudit Aymeri et Guillelme.

(Cov., 156.)

Ne ja reproche n'en aura Aymeris, Guibor la bele, Guillaumes li marchis.

(413-414.)

Bien pert qu'il est del lignaige Aymeri.

(517.)

Dolanz en iert Aymeris et Guillelmes, Guiberz li rous, et tuit cil de sa geste.

(623, 624.)

Quant le saura Aymeris au vis fier, Et dans Guillaumes et Guibor sa moillier.

(794, 795.)

It is true that our argument applies only to passages that may come from B, or that may have undergone the influence of B, for Aïmer was dead at the time of D. A passage, such as line 156, however, might have borne even originally the name Aïmer, and have belonged to D.

For what reason, if any, should Aimer have been eliminated from the *Covenant*? According to our theory, this poem was formed by a blending of two different sources, in the first of which, B, the hero in question played a rôle, but not in D, the

second, inasmuch as he died in the events that closed B. It is clear, then, that he might be retained in the resultant poem, and play a rôle throughout it, or that he might have been eliminated. In the first case, his activity would have been extended from the portions of the new poem coming from B to those coming from D. In the second case, he would need only to be eliminated from the portions coming from B. Normally, the former condition would prevail: it would be easier to find something for an important hero to do during a part of a composition in which he did not originally appear, than to eliminate him from the remainder in which he filled one of the most important places, as did Aimer in B. As we have seen, however, the latter of the above possibilities prevailed: Aimer was eliminated, so much so, that his name does not even appear in the composite poem. There must have been powerful reasons for the reversal of what would have been, as we have said, the normal action. Why was he eliminated?

We have already said that, in our opinion, the Covenant marks the sloughing off from the cycle of Aimer of the legend of Vivien, and its soldering to that of Guillaume. If we are correct in this supposition, nothing would be more natural than this disappearance of the former hero, provided his retirement paved the way for the second. And this is precisely the fact: Vivien henceforth becomes so absolutely a part of the cycle of Guillaume, that he is said to have been reared by Guibor, presumably at Orange; that he is supposed to have been knighted in her presence, probably at Orange; that the majority of the critics place the origin of his legend in the neighborhood of Orange, at Arles. This substitution of Guillaume was all the easier, because in D, Aimer did not appear at all, whereas his brother played a most important rôle. While, therefore, the activity of Guillaume was extended over the events of B, in as far as they were utilized in the new epic, that of Aimer disappeared in these same events.

In what we have said above, reasons have been given why the substitution of Guillaume for his brother was almost inevitable. But this does not explain why the name of Aymeri should replace that of Aïmer.

It appears to us that these two changes go hand in hand. Aimer seems to have been replaced by Guillaume in passages where he performed acts, by Aymeri in passages which image and typify the idea of family. One need only examine with this in mind the passages cited above from the Covenant. They all concern the fier lignage; furthermore, they all speak of members of the family who are absent at the moment in question. While it is true that nothing better epitomizes the family in this case than the grandfather's name, this fact applies only to late poems. In the stage of the geste represented by N., the grandfather is a matter of entire indifference to Vivien; he even has little interest in Guillaume, so little that it is with difficulty that he is persuaded to march to the relief of Orange.81 The great patron and friend of Vivien is Aimer. He it is who tries to save the imprudent young hero when all others refuse; who, beaten back once, returns to the charge with a new army. After his death, and then only, in N., do we see Vivien closely in touch with Guillaume. Hence it is that the name of Aimer instead of Aymeri, in the above passages, would have such a natural air, in view of the elements we are discussing. Separated from his dear uncle, Aimer, besieged in the heart of the enemy's country, what more natural than that the young hero should speak many times of this uncle? In the light of this explanation, the lines 1855, 1856, which have been cited, have a full and convincing ring, if the name of the grandfather be replaced by that of the grandson:

> Se ge n'abat des meillor de lor terre, Ainz ne fui niés Aïmer ne Guillelme!

We are inclined to think that the substitution of Aymeri was intentional. Except for this trait, the present *Covenant* may well have been the result of a slow, unconscious blending. The sub-

⁸¹ N., vol. I, p. 498.

stitution of which we speak, however, seems to have been carried out blindly, systematically. This substitution was all the easier because of the resemblance between the names. We believe even that this substitution is responsible for the presence in *Aliscans* of Aymeri,—a most surprising fact. For the *Covenant* and parts of *Aliscans* are virtually one and the same tissue, we might almost say, one and the same poem. This, however, is not the moment for a long and intricate digression, even although its evidence might support our contention.

CHAPTER VI

CONCLUSION

It thus appears that our theory concerning the origin of the present Covenant explains wholly or in large part the important inconsistencies of the poem, to-wit: the hero's having waged war seven years in Spain, without the Emir's seeming to be aware of the fact; the vagueness of the topography, which is a blending of two different fields of battle; the matter of Guibor's surprise at the disaster; the confusion in the enumeration of Vivien's companions; the difficulty of Guillaume's raising an army in time; the killing of the horses in the newly-besieged castle; the presence of the castle in the recital; the inopportune sortie of Vivien; the separation of Vivien and his uncle, after they have at last come together; the passages that seem to have Vivien retreat, in spite of his vow; the words: filz fu Garin, and filz sui Garin; the mention of "Bordelois;" the army that Vivien says his uncle has in readiness, when we learn that he has made no preparations; the impossibility of an army riding from Orange to Spain and fighting a battle in the short time mentioned; the noise of the approaching army "from towards Orange," the strange and constant use of the name of Aymeri,82 etc. We have seen, too, that the theory of the dual origin of the Covenant explains a number of passages in Aliscans as well.

We mention here, merely for the form, a few more of the passages in the *Covenant* which seem to preserve traces of the events of B and D as related in N. In line 423, Vivien gives his men

82 To avoid digressing, we have omitted showing that this explanation applies equally to Aliscans, settling once for all the vexed question of the appearance there of Aymeri.

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permission to leave him if they wish; this is to be compared with N., vol. 1, p. 478, where we learn of the departure of seven thousand of his men. The statement made in line 279 that Vivien has twenty thousand men, whereas he was said at the beginning to have only half that number, is explained by the testimony of D: see N., vol. 2, p. 152. Similarly, the twenty thousand said to be with Guillaume, line 743, is borne out by the data from the same source, p. 160. Lines 1337, 1342 indicate rather the setting of an army with fixed camps, as in a siege, and does not fit the situation as given in the poem, namely, that of an army which has just landed, but is understandable from the testimony of B: see N., vol. I, pp. 472, 473, 484-486, 495, 496. The allusion to St. Jaque de Campostelle in line 1762 is much more appropriate in the light of the geography of N., whose testimony is, as frequently, supported by the Enfances Vivien. Line 445 is doubtless a trace of the scene in D, recounted in N., 2, p. 158. From the passage beginning in line 1374, we infer that Vivien must have been familiar with the armor of his adversary, which would hardly be the case in a battle with an unknown foe, newly landed. The lines refer to some such duel as that with the Alpatrice (N., 1, p. 486, or 505). The matter of the number of Vivien's men, which seems very confused in the French poem, receives valuable elucidation from N. The statement that he sets out with ten thousand men is borne out by B (cf. Covenant, 1. 55; N., I, p. 462). This statement that the hero had ten thousand men is repeated in the following passages of the Covenant, 331, 358, 1057, 1079, 1092. Vivien's band is reduced in the battle, until we read in lines 453, 454, that few remain. The operations which thus reduce the forces of the Christians seem to have lasted only one day when the number is already reduced to fifteen hundred (lines 762-764, cf. 675). In line 1093, we are told that only five hundred remain; in line 1412, three hundred, in line 1556, from one to three score. This appears to be the size of Vivien's band at the moment when his uncle arrives. The number of those who succeed in penetrating into the castle is fifteen hundred (764). All this seems reasonable. Now for the contradictions. We learn that Vivien attacked with ten thousand, yet in line 763 it is stated that his men numbered, when the battle began that morning, three thousand. Again, in line 279, Vivien is said to have had, at the time when the Saracens landed to attack him, twenty thousand. We explain these difficulties by the testimony of B and of D. In B, Vivien has indeed ten thousand on beginning his expedition. Besieged in Galizia, he loses men all the time, until, at the moment of cutting his way to the castle, he has only one thousand (N., I, p. 478). In the castle were already five hundred (p. 469). This makes fifteen hundred who are in the castle at the moment when its siege begins (cf. the Covenant, line 764, where this number is also given). This reduction of the ten thousand in B is the result of several long campaigns, and not of one day's battle, which is more reasonable. But whence comes the number, twenty thousand, of line 279? This seems to us to be due to a confusion with the recital of D. We learn, in fact, that there Vivien actually had this number at the moment when began the fatal battle of one day, in which he was to lose his life (N., 2, p. 152). Turning now to the number of Guillaume's men as given in the Covenant, how does this square with the evidence of D? We read in 743 that Guillaume has twenty thousand men ready. In line 1142, Guillaume is said to have raised ten thousand men; in line 1220, he, together with his nephews who have levied troops, sets out with twenty thousand. According to the testimony of D, it was with this number that he sets out to the aid of Vivien (N., II., pp. 160 ss). In short, D supports here the Covenant. Again, in the Covenant, it is stated several times that Guillaume and Bertran divide their forces, and each advances with ten thousand men (lines 1484, 1485, 1500, 1504, 1514, 1570, 1574, 1588, 1605, 1740). This is evidently the same action as is related in D, where the messenger, Girart, who is conducting Guillaume to the field of battle, receives a portion of the army, while his uncle takes the rest (N., II., p. 163). For the presence of Bertran here and his

substitution for Girart, see our discussion of the seventeenth difficulty, page 48 of this study.

One of the puzzling problems of the Covenant and of Aliscans is the presence, as chief of the Saracens, of Desramé. The critics have clearly seen that the legend of the taking of Orange and of Guibor should be followed by a poem or series of poems concerning the attempts of the wronged Tibaut to avenge himself.83 That is, Guillaume and Tibaut were evidently the protagonists of several early poems; everything indicates that their hatred of each other was the motif of epic narrations which have disappeared. It is surprising to find, especially in Aliscans, another hero occupying the position of Guillaume's chief and most bitter foe. The sources as they exist, indeed, try to motivate this hostility on the part of Desramé by depicting him as the uncle of Tibaut, which only shows how widely spread must have been the knowledge of the hatred between these heroes. Unfortunately, the Covenant, examined as to its dual source, does not throw much light on the question of the appearance of this new Saracen protagonist-or, rather, as we prefer to put it-his substitution for Tibaut. The substitution in Aliscans—which may of course have occasioned that of the poem we are examining—seems to us due mainly to the fact that the Saracen hero of the Renoart was Desramé, and that this hero replaced Tibaut in the new poem, Aliscans, one of whose main component elements was the Renoart. In other words, the Renoart having been fused, in the lapse of time, with other sources to form a new poem, the Saracen leader of the Renoart was adopted as the type in the new epic, and ended by effacing all others. If this theory be true, it gives evidence of the popularity of the Renoart, and of the waning of the legend of Tibaut. The Covenant, as we have said, may simply have followed Aliscans; nothing, indeed, would have been more inevitable. This change from Tibaut to Desramé

⁸³ See, for instance, Quellenwert, etc., pp. 34, 35.

would have been facilitated by the fact that according to the testimony of N., a Saracen hero named Malduche di Rames, a relative of Tibaut, played a rôle in the events of A (the Siège) and in those of D.: see N., 1, pp. 417 (variant in note 7), 418, 433, 502; vol. II., pp. 147, 148, 150, 151, 154, 159, 206, 222, etc.⁸⁴ The value of this evidence is, to be sure, not great. Far more convincing is that submitted briefly in our discussion of difficulty number sixteen; evidence which substantiates that of B., in showing that, at the moment in question, Tibaut was besieging Orange, as is related in A and B.

While we are speaking of external evidence as to Tibaut's presence or absence in the primitive sources whence came the *Covenant*, is there any testimony other than that of N. throwing light on this point? Foucon de Candie gives evidence that Tibaut was present, and, indeed, in a commanding position, at the battle where Vivien died; on p. 83 of the edition of Tarbé, he boasts of having slain Vivien in this battle; and further testimony is found on p. 86, where the statement is made that Tibaut, in the conversation just related, boasted of having slain Vivien.

Molt menace Guillaume, le conte poigneor, Et dit qu'il li a mort le fil de sa seror.

There remains at least one other passage in the Covenant which seems to us to offer evidence that Tibaut, and not Desramé, was the adversary in the original sources of this poem. We refer to lines 1681-1691. Here are the statements of this passage: the friends of Desramé say to him: "Have no fear! This day we shall deliver to you the damnable traitor who has worked you such injury, and who took away from Tibaut his wife and his city! This day Guillaume shall lose his power, and you shall have him at your disposal. Later, you can take him to your city, Palerne, and judge him there according to our custom!" In this passage, the name Palerne may offer evidence permitting us to decide whether

⁸⁴ Cf. Aliscans, 5080.

these words were addressed primitively to Desramé, as here stated, or to another. Of what Saracen king was Palerne the seat? The city in question is mentioned in Aliscans in the following passages: 5078, 1398; 5244; 1475; 3260; 1853; also in Rolin's edition varianten line 355.85 The first two passages and the last are the only ones that offer any testimony as to the point in question. It appears according to these passages that Palerne was the seat of Synagon, who is said to have held Guillaume prisoner there for a long time.86 In Foucon de Candie Palerne is ascribed to Tibaut: see pp. 108, 133 (Et Palerne la riche qu'il prist o sa moillier), 137. It is clear, then, that Aliscans ascribes Palerne to Synagon, while one poem at least, Foucon, ascribes it to Tibaut. No source, as far as we know, ascribes it to Desramé 87, save the Covenant in the passage under discussion 88. Aside from this passage, it is a choice between Tibaut and Synagon. We believe that the mention of the latter in this connection is due to his substitution here for Tibaut, whom the remanieurs, it is apparent, desired for some reason to eliminate from the action of Aliscans. That Tibaut, the lifelong enemy of Guillaume, must have been present at the siege of Orange and at the battle, stands to reason. Indeed, in line 1776, at the moment when the siege begins, he is named among the Saracen kings present. If he was present, none but a commanding position could have been given him, in view of his legendary prowess and his hatred against Guillaume. Hence he would have been among those honored with one of the divisions of the army. In other words, he would be men-

⁸⁵ Cf. the following lines in edition of Jonckbloet: 37, 1619, 1701, 2095, 3502, 5343, 6300, 7550.

⁸⁶ From this passage came the Synagon episode in the Moniage 11.

⁸⁷ Indeed, if we may judge by what Renoart relates of himself in the passage beginning in line 7529, edition of Jonckbloet, Palerne cannot have been the seat of Desramé. We do not lay emphasis on this testimony, for the legend of Renoart is too recent to make this evidence of great value.

⁸⁸ To this should be added the lines 34-36, Aliscans, edition Jonck-bloet, cf. variations in Rolin. We shall discuss this passage in a moment,

tioned in the passage cited (lines 5069-5096). He is not mentioned here, save by one Ms., m. line 5080. We believe that throughout the poem an effort has been made to eliminate Tibaut, and that here in the muster of the Saracen army his name has been replaced (save in m) by that of one Synagon, who is said to have been lord of Palerne (lines 5076-5079). There is no external evidence of sufficient age to be pertinent which ascribes a rôle in this poem to a hero Synagon. On the contrary, N., in the passage containing the muster for the battle, mentions Tibaut, and knows nothing whatever of Synagon 89. Furthermore, N. states that Tibaut retained in his division his brother, l'Alpatrice. We see, in fact, in line 5238 ss., where the Christians penetrate to the tents of the Aupatri, that they are attacked by those from Palerne and by Synagon.

A number of the best Mss, contain another passage of importance touching Palerne. This passage is found in Jonckbloet's edition, lines 34-37:

Atant ez vos Desramé lor seignor,
Sus la breaigne qui li cort de vigor.
Cil sont o lui d'Inde Superior,
Et de Palerne, et li estraenor,
C'est une gent qui vers Deu n'a amor.
Un espié portent par molt ruiste freor,
Dont si ont mort maint gentil vavasor,
Lui et Tacon, le fil de sa seror.

It is apparent enough that the last two lines have something wrong about them, and we are convinced of this when we see that the following Mss. offer a reading visibly more correct, and evidently more primitive: M, m, d, L, C. Here is the reading of these Mss. for the two lines in question:

Dont il ot mort maint gentil vavasor, Et a Guillaume le fil de sa seror.

89 1, p. 502. Synagon is totally unknown to N.

Le fil de sa seror is none other than Vivien 90, who, as we know, before being ascribed to Guillaume as nephew by Garin, was said to have been the son of a sister to Guillaume. Desramé, then, is here said to have slain Vivien. We are reminded instantly of the passage already cited from Foucon, where it is stated of Tibaut

Molt menace Guillaume, le conte poigneor, Et dit qu'il li a mort le fil de sa serot.

The evidence seems to us to indicate overwhelmingly that Palerne was the seat of Tibaut, and that in the passage mentioned in the *Covenant* (1681-1691) we have evidence indicating the substitution of Desramé for Tibaut. All of this supports the testimony of N. A close examination of all the passages in the two epics where Desramé appears, give further evidence of this substitution. This is not, however, the moment for so long a digression as a discussion of this evidence would require.

A number of other passages could be adduced, which receive for the first time their full meaning in the light of the theory under discussion, that of the dual origin of the Covenant. Enough passages have probably already been mentioned, however, to leave in the reader's mind the conviction that this theory offers the true explanation of the inconsistencies of the poem. A full discussion of the cyclic difficulties of the Covenant would be sufficient to convince the most obdurate that this epic is really formed by the fusion of the two ancient poems whose events are related by Andrea da Barberino. The supposition of this fusion as we have given it offers at last a tenable explanation of the strange use of the words "Archant" and "Aliscans" as equivalents. The first comes from the source B, the second from D. When these sources blent into the new poem, the Covenant, and overflowed, as it were, forming the beginning of another new poem, Aliscans, these words had lost their special application. The new poems spoke only of one battle,

⁹⁰ The bearing of this upon the question as to whether Guillaume saw Vivien before his death, is apparent.

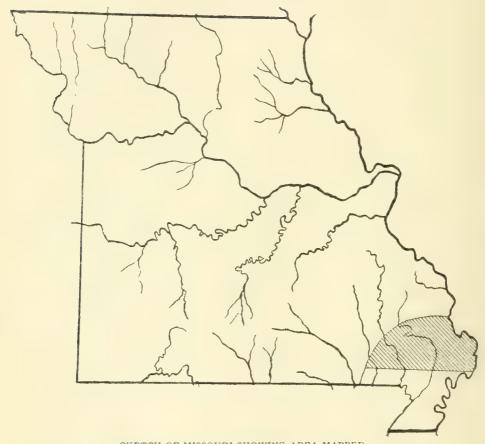
of only one battlefield, yet gave to them, now the name employed in source B, now that in source D. The use of these two names for the same battlefield had metrical advantages not to be scorned, especially when arrived the period for abandoning assonance for rhyme. Nothing could be more typical of the intimate and complete fusion of B and D than the current synonymous employment of these words in *Aliscans* and the *Covenant*. An interesting conclusion to be drawn from all this, is that if the second battlefield had been called the Archant, the poem *Aliscans* would, in all probability, have borne this name as its title. Reasoning inversely, the fact that this admirable poem bears the name it does, indicates the order in which B and D were sung, their interrelation, which was correctly maintained by the jongleurs to the very last.

The element of D seems to us more important in the *Covenant* than that of B and naturally so. Not only was the latter an *incidence*, a slight and fragile structure, but it was inferior in tragic power to D, less firmly fixed in the imagination of men.

In the light of this theory, is one warranted in speaking of the battle of the *Covenant* as "the battle of Aliscans"? We answer, no! The struggle described in our poem is a blending of a number of battles and duels in B with the battle in D. Indeed, the major part of the battle of the *Covenant* is probably drawn from the expedition of Vivien into Portugal.

In conclusion, the *Covenant Vivien* affords one of the most interesting examples of the fusion of related poems. Fortunately, we have preserved enough external evidence to enable us, by combining this with internal evidence, to behold the process of epic fusion going on almost before our eyes. With only the internal evidence, we should be helpless, and we feel, on closing such an investigation, how many of the mysteries of literary history can never be solved for lack of due external evidence. Had a lover of old poems living at Florence, five hundred years ago, not set down a certain tale, the mysterious origin of the *Covenant Vivien* would never even have been suspected!

THE EVOLUTION OF THE NORTHERN PART OF THE LOWLANDS OF SOUTH-EASTERN MISSOURI



SKETCH OF MISSOURI SHOWING AREA MAPPED.

VOLUME I Number 3

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EDITED BY
FRANK THILLY
Professor of Philosophy

THE EVOLUTION OF THE NORTHERN PART OF THE LOWLANDS OF SOUTHEASTERN MISSOURI

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PREFACE

Interest in the region described in this paper was first excited by some studies of geological literature which I commenced while pursuing geographic studies in the department of Physical Geography, in Harvard University, in 1894-95.

The first study of the phenomena on the ground was made during the summer of 1898 while I was engaged in geological work for the Missouri Geological Survey. Only a few days were spent in the region at this time, and the whole time was devoted to a rapid examination of the whole area, in order to gain a general view. I returned to the region again, not for the Missouri Survey however, during the Christmas vacation of 1898-99, and spent the whole time in a careful study of the northern border of the lowlands and the adjacent Ozark highlands. During the summer of 1899 I spent a little more than a month in the study of the geology and geography of the southern part of the area, particularly of Crowley ridge. During this period I was again working under the direction of the Missouri Board of Geology and Mines. During the Christmas vacation, 1901-02, I returned to the region again with three students of the department of Geology in the University, and spent the time in geological and topographic mapping in the northern part of the area.

The geological and topographic maps accompanying this paper are based on the data collected during these trips. Very little has been obtained from other sources. In fact very little was known, except by persons living in the area, until these studies were begun. In a few cases the location of the bluff line along the northern and western side of the area has been taken from the United States Land Office surveys. This is true of the line of bluffs from near Cape Girardeau to Whitewater and from Poplar

Bluff to the south line of the map. The location of the rivers, except the Mississippi, where they lie far out in the lowlands, has been taken from the same source. There are, therefore, doubtless many places where these rivers are inaccurately located, but this does not in any way affect the results arrived at concerning the development of the lowlands. The location of the Mississippi river, as well as the general topography of the gorge between Commerce and Grays Point, was taken from the maps of the Mississippi River Commission.

The maps accompanying this paper are not the result of detailed instrumental surveys, and can lay no claim to absolute accuracy, but their inaccuracies are not large enough to affect the results of the discussions which follow. The northern part of the area was surveyed hastily with the traverse plane-table, and all the localities of especial interest were carefully surveyed and sketched by foot-traverses with compass and aneroid.

The writer desires to thank the following gentlemen for assistance rendered in various ways during the progress of the work: Mr. Russell Harding, General Manager of the Missouri Pacific Railway; Mr. F. H. Britton, General Manager of the St. Louis Southwestern Railway; Mr. Louis Houck, General Manager of the Houck lines; Mr. E. F. Blomeyer, General Manager of the Southern Missouri and Arkansas Railway; Mr. McKee, of Greenbrier; and Messrs. A. T. Sweet, Otto Veatch, and E. H. Favor. The last three are students in the University of Missouri. They did the greater part of the plane-table work.

C. F. MARBUT.

Columbia, Missouri, May 15, 1902.

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THE EVOLUTION OF THE NORTHERN PART OF THE LOWLANDS OF SOUTHEASTERN MISSOURI

INTRODUCTION

LOCATION, AREA, AND BOUNDARIES

The lowlands of southeastern Missouri are included within the areas of Cape Girardeau, Bollinger, Wayne, Butler, Scott, Stoddard, Mississippi, New Madrid, Dunklin, and Pemiscot counties. The northern and western boundary extends in a curved line from the Mississippi river, a mile south of Cape Girardeau, westward and southwestward by Dutchtown, Whitewater, Greenbrier, Wappapello, Poplar Bluff, Harviell, and Barfield to the state line, a few miles south of the last-named place. Toward the east the lowlands extend across the Mississippi river into the western parts of Tennessee and Kentucky and the southern part of Illinois. Southward they extend into the states of Arkansas, Louisiana, and Mississippi. The eastern boundary of that part of the lowland discussed in this paper is the Mississippi river, and the southern boundary is an east and west line near the parallel of New Madrid. The northern and western line of the lowlands is a steep rocky bluff, varying in steepness and height, but everywhere constituting a sharp rise from the level of the lowlands to the top of the uplands lying to the northward and westward. There is at no place along this line a gradual ascent from the lowland to the upland. The outcropping edges of the limestones of the Ozark region are exposed along the whole line. The trend of this bluff, its slopes and relation to the lowland are in all respects the same

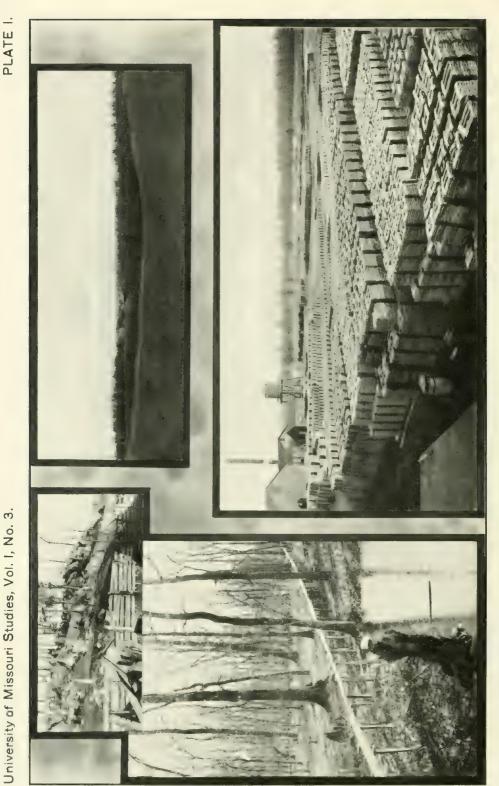
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as the relation of river bluffs to the adjacent river flood plains. Although it is steep and made up of limestone layers horizontally disposed, yet the amount of talus at its base is extremely small.

The height of the top of the bluff above the lowland expresses delicately the character of the rock and the relation between the position of the bluff and the line where the Ozark beds dip beneath the level of the lowlands. The bluff is highest where it advances farthest toward the central high area of the Ozark plateau, and lowest where it recedes farthest from that position. It is about fifty feet high in the neighborhood of Cape Girardeau. Westward it gradually increases to a maximum about half way between Wappapello and Greenbrier where its height is about 250 feet. Thence southward its height diminishes to about 100 feet at Poplar Bluff, and to fifty feet again at the state line.

The eastern and southern boundaries here adopted are not the boundaries of the lowlands in these directions. The area included within the boundaries here described is about 2,500 square miles.





3. Lost Hill from Hickory Ridge. 4. Lowland Industry: Staveyard at Brownwood.

1. Quartzite at Bell City.
2. The Lowland at Morehouse.

PART I. DESCRIPTION OF PHENOMENA

CHAPTER I

Physiography

The whole region consists of belts of lowland enclosing belts and isolated areas of upland. The lowland belts are continuous and have at the north end a general westerly trend, then southwesterly, and finally southerly where they cross the state line. This is the direction also of the trend of the longer axes of the upland belts and areas.

A. THE LOWLANDS

There are two main belts of lowland separated by a long ridge of varying width. They are joined by one broad belt of lowland crossing the ridge and by several river and creek valleys, all narrow.

The two belts are the Advance and the Cairo belts.

The Advance belt lies along the northern and western sides of the lowland region, and the Cairo belt along the southern and eastern sides. The whole area of the northern end of the Advance belt is included within the boundaries of the region described in this paper, while only that part of the Cairo belt lying west of the Mississippi river is included. Both belts extend southward far beyond the limits of the region described.

The Advance belt is essentially a unit. It has, however, one loop or adjacent belt, which branches off from the main belt at Allenville and runs westward and southwestward to near Greenbrier where it re-enters the main belt. It may be considered here

as a loop of the Advance belt, which reaches around and encloses Hickory ridge. Its origin is not the same, however, as that of the main belt. It will be described as the Drum lowland belt.

The Cairo belt is subdivided into two subordinate belts by a low terrace-like ridge. These two belts will be described as the Morehouse and Charleston lowlands, respectively. The low terrace-ridge will be described as the Sikeston ridge. To the Morehouse lowland will be attached its northward extension, which reaches through the ridge and connects it with the Advance lowland.

I. The Advance Lowland

The Advance belt leaves the existing valley of the Mississippi a few miles below Cape Girardeau. It trends at first westward, then slightly northwestward, then westward and southwestward by way of Delta, Advance, Brownwood, Headquarters, Wappapello, and Neelysville to the state line and beyond.

Its width where it leaves the Mississippi is about two and a quarter miles, and its elevation is the same as that of the Mississippi flood plain opposite Cape Girardeau, and the material is of the same character also. Westward it becomes slightly broader by the recession of the bluffs along its northern side, so that at Delta its width is eight miles. In the neighborhood of Delta and north of it the immediate surface deposit is a clay, rather dense and of whitish color after exposure. This kind of deposit is thin, however, the sandy deposit which characterizes it farther eastward being reached beneath a very few feet of this clay. It does not extend far south of Delta. Whitewater river, which enters this lowland belt five or six miles north of Delta, flows southward within half a mile of the village, and to this is attributed the clavey surface deposit of the neighborhood; this deposit being of the same nature as that making up the lower flood plains of this and other streams of the eastern Ozarks before they reach the lowlands. The elevation of Delta according to the levels of the Iron Mountain railroad, checked by precise levels at Birds Point on the Mississippi river opposite Cairo, is 341½ feet above sea level. This is a little lower, about a foot, than the level of this lowland where it leaves the Mississippi. The lowland at Delta has been raised slightly, since it was formed by the deposit of clay described above. It seems, therefore, that this lowland has a very slight slope westward.

Beyond Delta the width of the Advance belt becomes rapidly less on account of the appearance of Hickory ridge, which begins half a mile northwest of the village and continues southwestward for about fifteen miles, separating the Advance lowland belt from the Drum belt lying to the north of it and with which it is connected at both ends. In fact the two lowlands are so related that they might be considered as one, and Hickory ridge as a mere isolated ridge lying wholly within it. Owing, however, to their different origins as here interpreted and described later in this report, they are considered as separate lowlands. The general character of the lowland remains the same, excepting its width, westward from Delta to the Chalk Bluff road, which passes through Lakeville and crosses the railway at Bloomfield Crossing. Here a sharp change in the elevation of the floor of the valley and of the character of the surface deposits takes place. The valley floor rises by a sort of escarpment or steep slope about ten feet, and from being of an argillaceous character on the surface, it becomes very sandy. The sand is rather fine-grained, contains some clay mixed with it, and is of a light color. It seems to be a little coarser and to have a larger proportion of sand than the alluvial deposits now formed by the Mississippi river, and less coarse and with a greater proportion of clay than the sand in the vicinity of Benton and Morley, which will be described below. The lowland here is about four and one-half miles wide. The lowland floor continues sandy for about three miles, when on approaching Castor river it again becomes argillaceous, of a character much like that in the neighborhood of Delta. There is, however, at least one low sand ridge west of Castor river, which is interpreted here as a remnant of the old sandy plain which has been elsewhere removed and replaced by clay. This ridge lies at Sturdivant station and is about eight feet high and one fourth of a mile long.

Although no levels are available, yet the evidence indicates that there is a very slight westward slope of that part of the low-land lying between the Chalk Bluff road and Brownwood. This evidence lies in the fact that the drainage from near the eastern border of the sandy part of the lowland is westward to Castor river. The slope is so slight, however, that when Castor river is very high the water flows from the river eastward through one of the sloughs, in a reversed direction, to the lower area east of the Chalk Bluff road.

From Advance westward to a point about due west of Puxico the width of this belt of lowland decreases gradually and about uniformly from about four and one-half miles to about three miles. As has been already stated, the bluffs here are high, steep, and rocky on both sides. The lowland floor is argillaceous and very flat. Water spreads over the greater part of it, which, owing to the clay soil and the heavy timber, remains during a large part of the year. Southwest of this the lowland widens rapidly by the retreat eastward of its eastern side and the rather sharp southwestward turn of the western bluffs, south of where the St. Francis river enters the belt.

The character of the floor of the lowland remains argillaceous to the state line and beyond, except a few low, long, flat-topped sandy "islands," which lie in it at various places. They furnish at the present time about the only bits of land favorable for agriculture in this part of the belt, except narrow strips along the immediate banks of the numerous sloughs. One of these islands lies about five miles east of Neelysville, and a small one at Ash Hills, east of Poplar Bluff.

In that part of this lowland belt where the floor is made up of clay, sand is encountered everywhere, according to the testimony of well-borers, at depths varying from eight to twenty feet.

This belt of lowland continues southward beyond the Missouri-Arkansas state line and finally opens out into the Mississippi flood plain south of Helena, Arkansas.

The elevation of this belt is 342 feet where it leaves the Mississippi river; at Delta it is about 340 feet. At Bloomfield Crossing, in the absence of exact levels, its elevation is estimated at 345

feet. It is probably between this elevation and 350 feet, but I give the minimum figure. East of Poplar Bluff, on the general level of the lower part of the belt, its elevation, according to the levels of the Iron Mountain railway, is about 332 feet. Southward from this it continually decreases in elevation. There is a slope, therefore, westward from the Mississippi river to Delta or apparently to "The Old Field" five miles west of the village. Then a rise to Bloomfield Crossing. From this point there is a continuous slope of the lowland floor westward and southward.

The drainage of the belt is crosswise. Whitewater river enters it north of Delta, crosses it, and follows the Morehouse lowland southward. Rum branch does likewise. Castor river enters from the Ozark highlands, crosses it, and leaves it by a rather narrow valley, through Crowley ridge, and finally flows southward through the Morehouse lowland. The St. Francis river, after following it to the state line, finally leaves it through a narrow gap in Crowley ridge and reaches the Mississippi with Whitewater and Castor. Black and Current rivers, and a small stream draining the lowland itself, all follow the lowland to where it opens into the Mississippi flood plain south of Helena, Arkansas.

2. The Drum Loweland

The Drum lowland belt extends from Allenville, where it leaves the Advance lowland, westard and southwestward to the parallel of Brownwood, where it re-enters the same belt. It is bordered on the north side by the Ozark hills and on the south by Hickory ridge and the Goose Pond hills, which separate it from the Advance lowland.

Its width at the beginning west of Allenville is about two miles. At Drum postoffice it is about the same, and at the extreme western end it is slightly less. The bluffs on both sides are steep and made up of the limestones and cherts of the Ozark series, capped near the eastern end by a bed of Loess.

The material of the floor is, on the surface, clay of the same character as that forming the flood plain of Castor and Whitewater rivers and other Ozark streams near the eastern end, though well within this lowland a driller reports finding sand beneath the eight or ten feet of surface clay, which extended down to a depth of about ninety feet, where the drilling stopped. No drilling has been reported from any other part of the belt.

A small part of the drainage of this belt passes out at each end, while the central part is drained southward through a gap in Hickory ridge into the Advance lowland. No elevations of points in this lowland have been determined.

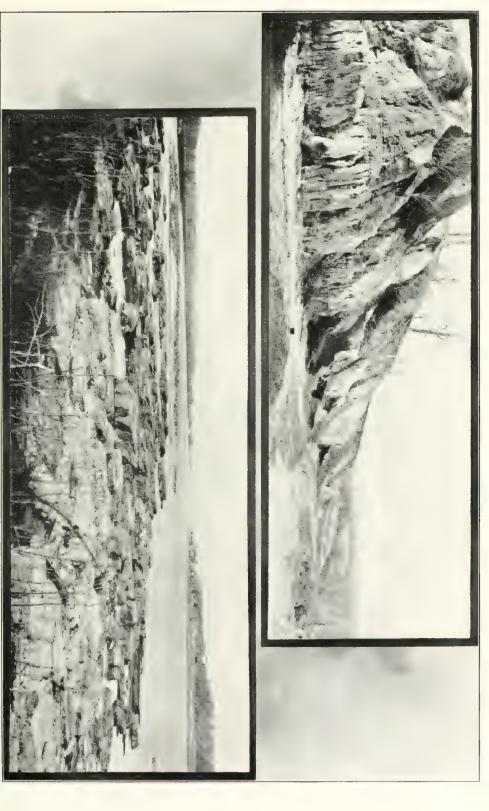
3. The Cairo Lowland

The Cairo lowland occupies the eastern and southeastern portions of the area. It will be described as the Morehouse and Charleston lowlands, and the Sikeston ridge.

The Morehouse lowland belt leaves the Advance lowland south of Delta and pursues a nearly due southwardly course to the Mississippi river a few miles south of New Madrid. At its northern end the distance from the northeastern angle of Crowley ridge across the lowland to the hills near Caney creek, the northwestern angle of the Benton ridge, is about ten miles. If, however, we regard its width as extending only from the eastern side of Bird hill to the hills east of Caney creek, it is only about five miles wide. Opposite Bell City its width is about ten miles, between Dexter and Sikeston it is twenty miles, and on the meridian of Malden it is about twenty-five miles.

At its northern end this lowland is flat, apparently level, much of it often covered with a few inches of water. This is especially the case in the whole of the belt, except on a strip a few hundred yards wide on the eastern, southern, and western sides of the rocky "islands" standing in it and a narrow strip along the west side of Benton ridge and the eastern side of Crowley ridge. These borders are, however, the result of mere local aggradation of the lowland floor since its formation, by material from the adjacent ridges.

From two miles south of Dexter, southward, a terrace of increasing width lies between the low part of this belt and the



Tertiary Sand with Loess Cap at Commerce.
 Trenton Limestone in Channel of Mississippi below Gray's Point.



eastern edge of Crowley ridge. The eastern edge of this border runs due southward from near Dexter, where it leaves the ridge (Crowley), to the latitude of Kennett in Dunklin county; south of this its course is southwestward. Along the whole of this distance the limit is a definite one, there being a steep descent of about twenty feet from the level of the bench or terrace to that of the floor of the lower part of the lowland. The surface of the terrace rises slightly and about uniformly to the foot of the steep slope of Crowley ridge. The floors of both the lower parts of the lowland and of the terrace consist of sand, though that of the terrace is coarser and purer than that of the lower land.

The floor of the low part of the belt east of Kennett is level for a width of about ten miles. East of Dexter there is a series of low ridges with swampy cypress sloughs between. These extend eastward to Grays ridge. Thence eastward to within a mile of Sikeston the lowland is flat and subject to overflow. East of Kennett the lowland is under a few inches of water during ordinary seasons, and a strip about half a mile wide along Little river is permanently submerged. East of Dexter the lowland is not so often submerged. Castor and Little (Whitewater) rivers have definite channels except where locally choked up with driftwood. The banks are low so that they overflow during ordinary floods. The low ridges east of Dexter are never submerged, though they are usually only five to eight feet above the lower land of the belt. They consist of a thin upper soil of loamy clay underlain by sand. Southward they disappear before the latitude of Kennett is reached. Their extension northward has not been traced, though they do not seem to reach many miles in this direction.

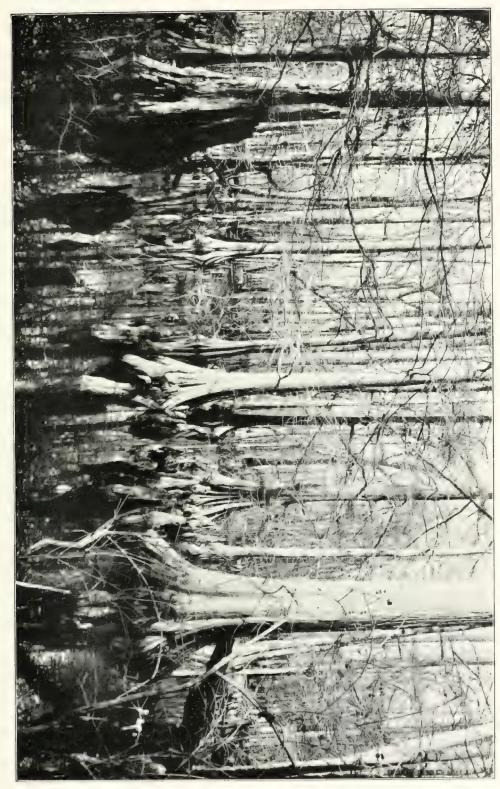
The low part of this lowland, east of Dexter, lying between Grays ridge and Sikeston, is about ten miles wide. West of this is a belt of low country consisting of low ridges and swampy belts extending westward to the foot of Crowley ridge. The most westerly of these swampy belts is continuous with the western border of the low belt east of Kennett. South of the Dexter-Sikeston line these low ridges disappear, and the low swampy strips between them unite to form the western part of the Kennett

low belt. The eastern side of the Morehouse lowland belt is limited by the hills between Caney creek and Morley and thence southward to New Madrid by the low clay and sand ridge (Sikeston ridge) which ends at the latter place. Thence southward the low part of the belt is limited by the slightly higher alluvium deposited by the Mississippi in recent times. The elevation of this belt where it leaves the Advance belt is about 335 feet. At Morehouse it is 300, and east of Malden it is about 285 feet above sea level.

The Charleston lowland belt includes all the low land lying between the Sikeston ridge on the west, the Mississippi river on the east and south, and the Benton hills on the north. It begins at a point at Commerce, reaches a maximum width between Birds Point and Sikeston, and narrows to a point again at New Madrid. From New Madrid northward to the Cairo branch of the Iron Mountain railroad, the western limit is a definite one. North of this there is a gradual change from the low country on the east to a series of low sandy ridges with swampy sloughs between, much like the western side of the Morehouse lowland south of Dexter. These low ridges are in reality tongues of sand, which stretch southward like fingers from the sandy plain lying under the southern foot of the Benton ridge.

The Charleston lowland is underlain by the recent alluvium of the Mississippi river. Parts of it seem to be of the nature of a terrace deposit, older than the alluvium deposited during the present stand of the land. This statement, however, is based only on the fact that the whole plain is not subject to overflow. It is all sandy, some of it apparently more sandy than the presently forming alluvium, but this occurs chiefly toward the western side, where it would contain a larger proportion of the material of that side of the bordering higher country, which is almost pure gray sand.

Localities on this plain are everywhere higher than places on the Morehouse belt on the same meridians. The elevation of Charleston is 323 feet above sea level, while that of Morehouse due west of it is 300 feet. The elevation of Belmont, on the banks of the Mississippi river, is 310 feet, while that of the lowland east of Malden is only about 285 feet.



A Cypress Slough in the Advance Lowland.



The drainage in this and the Morehouse belt follows the lowland belt, and the distribution of other features, such as low ridges, sloughs, etc., is longitudinal, while in the Advance belt this distribution is transverse to the trend of the lowland.

4. The Duck Creek Lowland

A rather narrow belt of lowland extends southward from the Advance lowland, south of Headquarters, re-entering the same belt southwest of St. Francisville. It is about a mile in average width, being a little wider than this at the southern end and a little narrower at the northern. The slopes at the northern end are steep, and the Palaeozoic limestones outcrop up to a height of about sixty feet above the lowland level. Further south the limestones dip beneath the lowland level, and the slopes are gradual, being made up of the Tertiary sands and of Loess.

At the southern end there are two flood plains in the belt, a central one and a higher one, existing as terraces on each side of the central one and about five feet above it. At the northern end of the belt the terrace does not exist.

The whole belt is imperfectly drained, is underlain with an argillaceous soil, and supports a growth of willow oaks. The greater part of it is drained northward into Castor river through a cypress slough called Duck creek.

5. Minor Lowlands

There are several narrow flat-bottomed alluvial strips extending across Crowley ridge within this area. Their westerly ends lie on a level with the Advance lowland, into which they open. Their eastern ends, however, are uniformly twenty to 100 feet above the level of the Morehouse lowland. They open out, in other words, into the Morehouse lowland twenty to 100 feet above its floor. The floors of these strips are highest also at their extreme eastern ends, from which they slope down to the level of the Advance lowland on the west. They will be described with Crow-

ley ridge since they are features properly belonging to that rather than independent features in themselves.

B. THE HILLS AND RIDGES

Between the lowland belts lie belts of upland or ridges varying in height, shape, and material, yet all of them, with one exception, are very sharply distinct from the lowlands. In addition to the ridges there are a number of isolated hills situated in and surrounded by the lowlands. They resemble the ridges in their height, material, and relation to the lowlands. They are mere isolated parts of the ridges. There is one main ridge within the region. It enters it as a broad hilly belt lying between Commerce and Grays Point. It is an extension, west of the Mississippi, of the upland of southern Illinois. From where it enters the area, it extends westward and southwestward between the Advance lowland on the north and west and the Cairo lowland on the south and east. The towns of Benton, Kelso, Piketon, Bloomfield, Puxico, Acorn Ridge, Asherville, and Dexter all stand on it. It is cut transversely by the broad northward extension of the Morehouse lowland belt. That part of the ridge lying east of this lowland belt is called the Benton ridge or Benton hills, and that part lying south and west of this belt is called Crowley ridge.

The ridge enclosed by the Advance and Drum lowland will be described as Hickory ridge, and the low ridge between the Morehouse and Charleston lowland will be described as the Sikeston ridge.

1. Crowley Ridge

Crowley ridge is the most extensive of the whole group of ridges. That part of it lying within the state of Missouri is only the northern end, the southern extremity reaching more than a hundred miles into Arkansas. Its extent and shape are shown on the accompanying map, so that attention will be called only to the most prominent and significant features.

At its broadest point it is about twenty miles broad. Thence southward it contracts gradually in width to the state line. It is here traversed by the valley of the St. Francis river. The width of the ridge on the north side of the valley is only a few hundred feet. Immediately south of the St. Francis river in Arkansas, it rises again, but does not again reach the width attained in Missouri. Its upper surface, except a narrow border along the eastern side, is a rolling plain sloping gently westward. A slight exception to this general rule is that part of it lying west of Puxico. This slopes southeastward to a line running north and south through that village. In this part of the ridge the highest part is on top of the bluff at the extreme western side, within a stone's throw of the lowland. On the rest of the ridge the line of maximum elevation runs along the eastern edge, within a quarter of a mile of the edge of the Morehouse lowland. The maximum elevation of this line above the lowland east of it, is about 300 feet, and the minimum is about twenty. This line is the drainage divide of the ridge also, almost the whole of the ridge being drained by westward flowing streams. These have reduced the surface of the ridge to a past mature relief, and a large part of it is approaching old age. All the creeks have broad flood plains, and high land exists only in narrow ridges on the main and secondary divides or in isolated hills in similar positions. Near the main divide, however, the valleys are deep and narrow, but the dissection is complete. The short eastwardly flowing streams are mere deep ravines. They are all very short and small. The eastern side drops off steeply to the Morehouse lowland, but the western side, except the small part near Puxico, slopes gradually to the Advance lowland. The eastern side is a steep bluff throughout its whole length. It is steepest, however, north of Dexter. South of that it can be easily ascended in most places by a road, though it is everywhere rather steep. The eastern edge is therefore a definite line, and can be definitely located. The western edge can not be definitely located in all cases, though usually it is definite enough for reasonably accurate location. The northern end, including the west side around to Mingo station, is also a line

of bluffs, except for a short distance of its course south of Advance. The course of the edge of the ridge is not straight, but it is more regular along the northern and eastern sides than along the western.

The ridge is cut into three blocks by three valleys whose floors lie at accordant elevations with the adjacent lowlands. These are the valleys of Castor and St. Francis rivers, which cross it from west to east, and Duck creek valley, which crosses it from north to south. One of these blocks is still further cut into about five smaller blocks by cross valleys of the kind referred to above, whose western ends lie at the level of the Advance lowland, but whose eastern ends lie above the level of the Morehouse lowland.

The most northerly of these cross valleys is that of Lick creek just north of Bloomfield. It does not run directly westward into the Advance lowland, but turns southward near Acorn Ridge and enters the lowland several miles south of Dudley. That part of the upland between the creek and the lowland is only five or six feet higher than the lowland. At Bloomfield its valley is about half a mile wide. Four miles up the creek, on the top of the steep eastward slope of Crowley ridge, it is still about a quarter of a mile wide, but is cut off by the slope down to the Morehouse lowland. Its level is about 100 feet above the lowland under it. Lick creek is formed by drainage which enters the valley from the sides. The head of the stream has been cut off.

The same thing has taken place at Dexter. The town stands on a flat plain nearly half a mile wide, which slopes westward to the level of Lick creek valley east of Dudley. Less than a quarter of a mile east of the railway station there is a drop from this level to that of the Morehouse lowland, a descent in this case of about sixty feet. This valley is drained westward by a stream of peculiar headless appearance. The course of the stream is due westward, but it is made up of tributaries entering it from the north and south; it extends above its upper main tributaries only as a diminutive wet weather slough. A stream, once tributary to it at the present site of the town, coming from the north, now flows into the Morehouse lowland and has cut a steep-sided gorge in the floor of the old valley.

Four miles south of Dexter another creek has been beheaded in the same way. The valley here at the eastern edge of the ridge is broader and lower than in either of the other cases cited. It is nearly a mile broad and only about twenty to twenty-five feet above the Malden terrace of the Morehouse lowland.

Still another gap, whose floor lies above the Morehouse lowland, occurs about ten miles south of Dexter, but it has not been accurately mapped. It has not yet been determined whether it is another occurrence of the same kind as at Dexter or whether it is due to an eastward meandering of the stream which excavated the Advance lowland and a later westward cutting of the stream which excavated the Morehouse lowland. Certain it is that the ridge becomes narrower in this direction, and such an occurrence is not improbable. Tust this sort of occurrence seems to have taken place at the state line where the St. Francis river crosses the ridge. The valley of the St. Francis river in passing across Crowlev ridge is about a quarter of a mile, or a little less, in width. The bluffs on both sides are steep and made up of soft clays and sands. The ridge on the northern side of the cross valley is only about 600 feet wide. On the south side it is slightly wider and widens rapidly southward.

Castor river crosses Crowley ridge through a valley a little more than ten miles in length. It is about a quarter of a mile wide at its western end. It widens rather rapidly to more than a mile in the middle part of its course and narrows again to but little more than half a mile where it passes the eastern edge of the ridge. In the western part of the valley one terrace lying about eight feet above the present flood plain of the river is noticeable. Where it leaves the ridge a terrace about ten feet high is noticeable. In the middle part of its course there seem to be two terraces separated by an interval of about six or eight feet.

2. Benton Ridge

Benton ridge is a transmississippi extension of the upland of southern Illinois. It is separated from the latter only by the narrow gorge of the Mississippi river between Grays Point and Commerce. Its northern side, in character and trend, accords with the western edge of the Illinois upland, and its southern edge corresponds in like manner with the southern edge of the latter. It is surrounded by a steep bluff, varying in height from a little less than one hundred to about one hundred and fifty feet. On its northern side the bluff descends to the level of the lowlands, but on the western and southern sides there is an apron of faint slope extending from the foot of the bluff out into the lowland for a mile or two. The top of the ridge is a dissected plain, but not in so advanced a stage of development as the western side of Crowley ridge. It is highest along its southern side. The drainage is northward and northwestward so that very little of it flows directly to the Mississippi river.

3. Sikeston Ridge

The Sikeston ridge extends from the southwest corner of Benton ridge southward to New Madrid. It might be considered as a southward extension of the latter, though, on account of its great difference in character from the latter, it will be considered as a separate feature. It is from one to three miles wide, generally of flat top, about twenty-five feet higher than the lowlands on each side of it, and distinctly separated from them by steeply sloping sides. It consists of a base of loose sand capped by a layer of brown loam.

4. Hickory Ridge

Hickory ridge lies in the northern part of the lowland area and is entirely surrounded by it. Its eastern end lies just west of the Iron Mountain railway track between Delta and Allenville. Its western end lies about a mile and a half north of Brownwood. It is not an unbroken ridge from one end to the other, but is cut into several small areas by cross valleys. The hills at the extreme western end bear the local name of Goose Pond hills. In the vicinity of Delta and Allenville its slopes are steep and rocky. West of Allenville the northern slope is

not bluff-like, but it is everywhere a steep slope. The southern side is a little steeper and has a greater number of localities where the slope is rocky and bluff-like. It is about a mile broad at its eastern end and tapers to a sharp point at the western. Its height varies from nearly 200 feet at the eastern end to about 100 at the western.

The isolated hills located on the map and referred to above are all situated between the northern end of Crowley ridge and the western side of Benton ridge. They are all of essentially the same character and are also of the same character as the adjacent parts of the ridges named. They bridge a large part of the gap between the two ridges by showing their former continuity. Each hill has its longest axis running north and south. Each has a steep slope on the northern end, extending down to the level of the lowland, and aprons of clay and sand extending outward from the southern end and from the southern halves of the sides. The apron extending out on the western side is broader than that on the eastern. Each is drained southwestwardly. They are all of about the same height, but their areas vary. Their maximum height is about 200 feet above the adjacent lowlands. They slope gradually southward, but not down to the level of the lowland. There is a bluff here as well as elsewhere.

CHAPTER II

GEOLOGY

In the description of the rocks of the region those of the northern rim of the lowlands will be included, as well as those of the lowland proper.

The rocks of the region are all of sedimentary origin. From the point of view of age they fall into two main groups, the one very old, the other very young.

For physiographic purposes also a division into two groups is most convenient, and the dividing plane is the same in the two cases.

The grouping of the rocks according to age is shown in the following table:

Recent.	Alluvium.
Pleistocene.	Loam. Loess.
Tertiary.	Gravels (Piketon). Sands (Benton). Clay (Idalia).
Palaeozoic.	Trenton limestone. Calciferous limestone and sandstone.

The grouping of the rocks from the physiographic point of view is into the indurated rocks and the non-indurated rocks. The indurated rocks are very old, the non-indurated rocks are very young.

A. THE INDURATED ROCKS

These rocks are of Palaeozoic age and belong to the Cambrian and Lower Silurian periods of geological time. They consist of limestones and sandstones.

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The geological studies for this paper were confined chiefly to the area of the lowland proper so that for the description of the rocks of the northern rim I shall depend chiefly on the studies of Shumard which were published in 1855.

With the exception of a capping of Loess which thins out westward, the Palaeozoic rocks make up the bluffs along the whole northern and western border of the Advance lowland belt. At Cape Girardeau this bluff is made up exclusively of thin-bedded Trenton limestone. It is here about fifty feet high. Westward the bluff becomes slightly higher, and at Rock Levee it is about eighty feet high and still made up of Trenton limestone. A short distance west of this the underlying Magnesian limestones appear at the foot of the bluff and rise higher toward the west. In the vicinity of Hubble creek the Trenton finally disappears from the top of the bluff, and west of this the whole bluff is made up of the rocks of the Ozark series. The Trenton is a fine-grained limestone, with very little chert, varying in color from a white to dark blue.

Shumard describes the occurrence of the first Magnesian, the Saccharoidal sandstone, the second Magnesian, the second sandstone, and the third Magnesian from the western part of Cape Girardeau county. The region from which most of these occurrences were described was not visited. West of Whitewater, however, no occurrences of sandstone, except a few isolated blocks, have been seen, and the whole of the bluff is composed of what seems to be the lower cherty limestones of the Ozark series.

South of the eastern end of the Advance lowland belt the Trenton limestone appears again in the northern bluffs of the Benton ridge. Its outcrop extends along the whole extent of the northern side of the latter, the Ozark limestones appearing beneath them toward the western end. Their outcrop runs southward down the gorge of the Mississippi, finally dipping beneath the level of the river about three miles above Commerce. The uneven upper surface of the Trenton, just above where it finally disappears, forms a belt in which many rocks project above the water, while others are buried by only a few inches or feet, thus forming the "Grand Chain" of the Mississippi river boatmen.

Certain sandstones between the Grand Chain and Commerce, referred to by Shumard, who apparently thought they belonged to the sandstones lying immediately above the Trenton, are now known to belong to the younger series of rocks of the region and will be described below.

West of Benton ridge Silurian rocks occur in all the bluffs of the various hills and ridges on the south side of the Advance low-land. They are confined to the lowest member of the series, the third Magnesian limestone. In the northern end of Bird hill the top of the cherty limestone is about sixty feet above the adjacent lowland. It outcrops on either side a short distance south of the northern end, but disappears beneath the lowland level somewhere north of the southern end of the hill. The same conditions exist on Cow hill and Lost hill. On Ringer hill, however, the limestone outcrops around the whole base except the extreme southern part.

On the northeastern corner of Crowley ridge the top of the limestone bluff is about eighty feet above the level of the lowland. Westward it descends slightly to about twenty-five feet due south of Advance and less than this south of Brownwood. South of Sturdivant it has again risen to sixty feet and maintains this height to Puxico, except a short space between Duck creek valley and Castor valley above Leora where it is a little less. West of the meridian of Puxico, the top of the limestone rises in the bluffs to a maximum of about 250 feet due west of the town. South of this the top of the limestone declines uniformly and finally disappears below the level of the Advance lowland a few miles south of Mingo station.

From this description it is seen that the top of the limestone is quite uniform in height along a line running slightly north of east, and that southward it dips beneath the level of the lowlands, the line connecting the points of disappearance beneath this plane being nearly an evenly curving line.

Between the Silurian limestones and the younger rocks of the region lies a wide time interval. The latter part of this interval is represented by erosion. How many of the immediately succeeding formations were deposited and then subsequently eroded away can not now be determined, though it is within the bounds of rea-

sonable inference that most of the upper Silurian and Devonian formations were deposited. They outcrop in the northern part of Cape Girardeau county and northward, and by their marine fossils and total lack of signs of terrestrial or near-shore marine conditions during their deposition, show that they originally had a much greater distribution southward and westward. The fact also that the Lower Carboniferous rocks and the Coal Measures occur only a little further north and east, places them in the same category. The Lower Carboniferous rocks have the same character, so far as lack of nearness to land area during deposition is concerned, as those just cited. The Coal Measures, it is true, show positive evidence of deposition close to land areas, but their occurrence both northeast and southwest of the area, and the occurrence of isolated areas on the top of the Ozarks far from the edge of any continuous coal field, indicate clearly their former extension overthe whole of southern Missouri and northern Arkansas.

The erosion interval referred to above seems to have begun therefore not earlier than late Carboniferous times and lasted until the beginning of the deposition of the clays of Crowley ridge, probably in early Tertiary times. However this may be, the interval was long enough to wear the country down to a nearly even surface. No trace of a sharp ravine has been found in it, and the even line of contact with the overlying beds, and of disappearance beneath the lowland plane show the surface to have been even.

B. THE NON-INDURATED ROCKS

The younger, non-indurated series of rocks of the region consist of six well defined members, when classified on the basis of lithological character and composition. They are, beginning with the lowest, dark and drab shale and clay, sands with occasional clay beds, gravels, loams and loamy clays, terrace loams, and alluvium.

I. The Shale (Idalia)

The shale bed is found only in Crowley ridge and usually only in the lower part. Toward the northern end of the ridge it

is uniformly dark in color, and where freshly exposed, it is black, very much resembling the soft black shales of the coal measures. South of Dexter it is gray to drab in color and slightly less shaly in structure. It outcrops along the steep eastern side of Crowley ridge, but the actual exposures, on account of the loose overlying sands and clays, are rare. It was not seen anywhere along the northern end of the ridge nor for several miles south of the end. The next overlying bed seems to lie directly on the Ozark limestones. The latter bed disappears beneath the base of the bluff about three miles north of Bell City. From this point southward the sands seem to extend to the base of the bluff until Bell City is passed. At Ardeola the lower sixty or eighty feet of bluff are made up of the shale bed. From this point southward the shale occurs in most of the ravines and seems to rise slightly higher in the bluff. It was not seen anywhere in Castor river valley, but at Idalia it was exposed fifty or sixty feet up in the bluff, though the top of the bed was not located. Between Idalia and Dexter the bluffs were not carefully examined. There is, however, a doubtful occurrence of the bed about a mile north of the latter place. In the vicinity of Dexter, although the exposures down to the base of the bluff are fairly good, the shale bed was not seen. The sands extend down to the level of the lowlands. The same conditions continue southward from Dexter for several miles. The ravines in the eastern edge of the ridge expose nothing but sand. About seven miles south of town a shale bed appears again, but it is of a grayish color and slightly coarser material than further north. It is exposed about fifty feet above the lowlands at this point, but less than a mile north of this locality an equally deep and fresh ravine exposes nothing but sand. At Chalk bluff on the state line where the ridge is crossed by the St. Francis river, Call 1 states that this shale or clay bed, as he terms it, is exposed up to about forty feet above the river. Between this and the last locality cited the outcrops were not studied in detail. In Arkansas Call shows that the bed has a great thickness and underlies the ridge from Chalk bluff to Helena. The bed has not been encountered anywhere along the west side

^{1 (}not. Surv. Ark., Vol. II. for 1889, p. 114.

of the ridge. It is met with in a few places in the heads of the streams flowing westward from the high divide at its eastern side. The most prominent exposure on this side is about two miles south of Piketon where the top rises about sixty feet above the valley bottom.

The relation of these beds to the overlying sands has not been clearly established. A good exposure of the contact between the two series of deposits has not been found. There are two facts, however, which enable one to infer the relation, and since both point to the same conclusion the inference can not be considered to be wholly unfounded. The upper surface of the clay bed is not even. The description given above shows that it rises and falls in broad undulations. It reaches a maximum height above the lowland plane near its northernmost exposure and descends below the level of the same plane south of Dexter. The change from the pure clay shale to the nearly pure sands of the overlying formation is a rapid one; while the actual contact has not been seen, yet a sufficiently near approach has been made to warrant the statement. At its northernmost outcrop the shale lies only a few miles from the southernmost outcrop of the Ozark limestones. If no erosion of the shale has taken place, this was the relation of this part of the shale bed to the shore-line at the time of its deposition. The shale could hardly have had the character which it now has, had it been deposited so close to a shore line where chert pebbles were doubtless abundant. It seems more probable that the shale bed was eroded before the deposition of the sands. The inference, therefore, is that the sands are unconformable on the shale.

2. The Sand (Benton)

The sands and gravels will be described separately. The sands constitute the lower of the two members and immediately overlie the Tertiary shales and clays. They vary considerably in character, the variation being apparently a function of the distance from the Mississippi river. They are of late Tertiary age, probably Lafayette.

They underlie the whole area of Crowley and Benton ridges and apparently also the whole of Sikeston ridge. They constitute the larger part of the mass of the isolated hills between Crowley and Benton ridges. They probably occur as a thin layer between the Silurian limestones and the Loess of Hickory ridge. They are thin at the northern end of Crowley ridge, finally thinning out on Hickory ridge or south of it, and thickening southward to nearly 200 feet south of Dexter. On the Sikeston ridge their thickness is not known, since the bottom of the formation has not been determined. They thin out about the northern edge of Benton ridge, but reach a thickness of about 200 feet at the southern edge.

Along the eastern side of Crowley ridge they reach a thickness great enough to enable them to become noticeable beneath the mantle of overlying and overwashed Loess, about three miles north of Bell City. A mile north of the village they extend from the base of the bluff to within thirty feet of the top. The lower beds consist chiefly of quartz sand rather well waterworn, containing a small percentage of small chert grains and a few small well worn and polished quartz and quartzite pebbles. The color of these beds when bleached is gray, but a short distance back from the edge of the bluff they are reddish. Overlying this are sand beds of finer grain, interstratified with whitish clay beds. The upper portion of the lower sandy portion is here locally cemented into a hard quartzite, which outcrops along the bluff for a mile or more above and below the town.

The same relation characteristic of a sandy lower member and sandy and clayey upper member, seems to hold at Bloomfield and further southward. At Bloomfield the sand occurs abundantly in the bottoms of the hollows and the clays occur higher up the hills, but still under the gravels. South of Dexter the lower sandy beds are about the only beds exposed for five or six miles. South of this the higher beds appear in a series of higher hills and seem to dip slightly southward. At Chalk Bluff the upper beds or at least sandy clay beds fill most of the interval between the Tertiary shales and the overlying gravels.

In the western part of Crowley ridge the reddish sands appear immediately beneath the Loess or the gravels. The sandy clay upper member of the series was not identified with certainty. On account of the similarity of this bed to certain clays which were thought to belong with the Loess, it is difficult to make a satisfactory distinction between them by an examination of the beds themselves when their stratigraphic relations are not clearly shown by the beds in contact with them. The western part of Crowley ridge is lower than the eastern, and since neither these sandy clay beds nor the overlying gravel beds occur except on a few high points, the presumption is that they have been eroded away. The existence of an upper sandy clay member and a lower sandy member, as here described, does not seem to obtain in Arkansas, according to the sections described by Call, 1 and in fact such a relation in Missouri has not been demonstrated beyond any doubt. The facts obtained, however, indicate that such a conclusion is warranted. Call's sections indicate that nearly the whole bed in Arkansas has the characteristics of the upper bed in Missouri. This is indicated by the relative thickness of the clayey member and the thinness or entire absence of the sandy member at Chalk Bluff.

The facts so far observed indicate that the character of the sands remains much the same throughout Crowley ridge with the exception of an increasing fineness of grain southward.

In Benton ridge the sands are well represented. The thickness has already been given. At Commerce the base of the bluff is composed of coarse reddish to brownish sands containing rather abundant small pebbles of quartz and dark or purple quartzite and occasional chert. This is overlain by a white, very fine-grained micaceous sand mixed with a whitish clay, the whole appearing in the bluff like a bed of clay (Plate I). Westward the lower sandy bed rises in the bluff and makes up the larger portion of it. The upper member is not so conspicuous though it seems to be present. The sands washed out from the ridge south and west are rather coarse, whitish, and made up chiefly of quartz grains. North of Commerce the sand is gradually modified by the appearance of a

¹Report on Crowley Ridge. Geol. Surv. Ark., Vol. II. for 1889.

partially cemented sandy mud rock alternating with shaly and sandy layers. These gradually thin out about the northern side of the ridge.

At several places within the area studied there are occurrences of massive beds and isolated blocks of a gray or white quartzite. Shumard cites its occurrence at Commerce, and without referring it to any definite horizon, seems to think it of Lower Silurian age. In volume XIII of the reports of the Missouri Geological Survey it is referred to the Potsdam. A similar rock is described by Call 2 from several localities on Crowley ridge in Arkansas and by him referred to the Tertiary. It is considered by him to be formed by mere local cementation of the sands.

A very little study of the occurrences in Missouri leads to the same conclusion as to their age. They graduate horizontally into the loose sands and are invariably underlain by them. They have not been found anywhere in contact with underlying indurated rocks. The occurrence at Commerce is the nearest to an outcrop of the latter, yet here the loose sands are well exposed beneath the quartzite beds.

The quartzite outcrops as an almost continuous bed from about two and one-half miles north of Bell City to nearly a mile south. (Plate I.) It occurs as a large isolated mass on top of the upland of Crowley ridge, two miles west of Bell City, as thin beds of sandstone on the Bloomfield road, five miles southeast of Leora, four or five miles east of the same place, at Rock Springs church southwest of Dexter, on Bird hill, and at Commerce.

The isolated block west of Bell City is thirty or forty feet long, twenty feet wide, and stands twenty feet above the surface. It represents merely local cementing of the sands, from around which the loose sands have been eroded. At Bell City the absence of these beds in the ravines, back from the ridge front, shows the rapid thinning in this direction. The most massive occurrences are on the eastern slope of Crowley ridge.

The relation of the sands to the overlying gravels is no more

¹ Mo. Geol. Surv. First and Second Annual Reports, 1855, Part II., p. 156, ² Op. cit., p. 99.

certainly known than that of the sands to the underlying clays. The actual contact of an undisturbed locality has not been found. The upper surface, however, of the sand bed was about even when the gravels were deposited.

The change in character of sediment from sand to gravel is not so great as that from evenly stratified clay to cross-bedded sand. There seems to have been only a short interval with very slight uplift or no interval at all between the deposition of the sands and the gravels. The latter alternative is the more probable.

3. The Gravels (Piketon)

The gravel bed seems originally to have been spread over the whole region or at least over that part lying south of the Advance lowland. At the present time scattered pebbles are found over the whole area of uplands, but the bed in an undisturbed condition has a very limited distribution. Where undisturbed, it is made up of chert, quartzite, and quartz pebbles mixed with a reddish sand. The latter fills the spaces between the pebbles, but has not been observed to occur in beds. The gravels are distinctly stratified and often show current bedding.

The chert pebbles constitute eighty per cent or possibly more of the pebbles in the bed. They are moderately well rounded, though not sufficiently worn to lose their original angularities. Their rounding is about equal in degree to that of the pebbles in the channels of the larger streams of the Ozarks. They have evidently never been rolled for any considerable length of time on a sea beach. The average size is about that of the South Missouri river pebbles or slightly less, being about an inch and a half in diameter. In character of material they are exactly like the pebbles now found in neighboring Ozark streams. They are composed chiefly of an amorphous, gray, nonfossiliferous chert and were evidently derived from the neighboring cherts of the southeastern slope of the Ozarks after they had been denuded practically to their present level. Further southward they contain a greater proportion, according to Call 1, of fossiliferous pebbles, the fossils being

¹ Op. cit., p. 120.

chiefly fragments of Crinoid stems. In this case they were evidently derived from the adjacent Ozark hills in Arkansas, which are made up of Lower Carboniferous cherty limestones. When not bleached since deposition the whole chert and sand mass is of a brownish color.

The remaining pebbles consist of black, fine-grained quartzite, an occasional reddish quartzite, and white quartz pebbles. They are all thoroughly waterworn and polished. Occasionally one of the dark quartzite pebbles will retain some of its original irregularities, but the quartz and most of the others are thoroughly rounded and have lost all trace of their original shapes. They are entirely unlike any of the pebbles in the neighboring Ozark rivers and show by the wear to which they have been subjected that they have traveled a long distance. Neither the quartz nor any of the quartzite of the kind found in the pebbles is known to occur in Missouri. Quartz veins occur in the Crystalline rocks of South Missouri, but not in sufficient quantity, proportionally, to account for the quartz element of the pebbles even if the excessive wear could be explained. They are evidently of northern origin, coming probably from well toward the northern part of the United States.

The chert and foreign pebbles are intimately mixed in the bed. There is some evidence, however, that the foreign pebbles are concentrated in the lower part of the bed. They are much smaller in size than the chert pebbles. A few have been found which reached an inch in diameter, though the average size is about half that or even less.

At the present time gravels occur scattered over the whole area, though in only a few isolated places in an undisturbed position. The underlying loose sand is so easily eroded that very little of the country stands at its original level. Currents that are able to carry the sands are not able to carry the coarser gravels, so the level is reduced by the washing out of the former, and the latter are left scattered over the surface as occasional pebbles or else as still coherent bodies in inclined positions on the hillsides, and as beds in all the stream channels.

A narrow strip of undisturbed gravel extends along the crest of the ridge from a short distance southeast of Piketon southward to within a mile and a half of Castor river. South of Castor they occur on the divide in a nearly continuous belt to about a mile and a half north of Dexter. From this point to within about two miles of the south line of Stoddard county, they do not occur, except in one or two very small patches about seven miles south of Dexter. In the neighborhood of the county line they stretch along the narrow crest of the ridge for a mile or so. South of this they do not occur again in Missouri.

On the divide between Lick creek and Castor river there is a narrow belt of hills on top of which the gravels occur in patches. North of Piketon the ridge was not examined carefully, though there is a rather high point near Tillman which is probably capped by the bed. The gravels do not seem to occur, except as scattered pebbles, on top of the group of hills in the lowland north of Bell City. They occur in an undisturbed position at a few places on the crest along the south side of Benton ridge. They have not been found in place on Hickory ridge.

North of the Drum and Advance lowland belts the horizon of these gravels has not yet been determined. Gravels occur in isolated patches, but they have not been found in undisturbed position anywhere. They occur most abundantly high up toward the tops of the higher parts of the upland, indicating that their horizon rises northward and that their absence from the northern end of Crowley ridge, Hickory ridge, and possibly also of Benton ridge is due to more vigorous erosion on account of higher original uplift.

A doubtful occurrence in the northwest part of section five, southwest of Bloomfield, indicates that the surface on which the gravels were deposited was lower in the western part of Crowley ridge than elsewhere. The undisturbed condition of the deposit is not clearly evident.

4. The Locss

The Loess over this region is a yellowish to brownish clay differing from the typical Loess of the Missouri river valley in being of finer grain and of a more yellowish color.

It occurs over the whole upland area of the region except on the higher points, those that are capped with undisturbed gravel. It has suffered severely from erosion and is cut into valleys and ravines, it has been subjected to land slides and otherwise disturbed and rearranged so that one is never sure that any outcrop is in place. It does not occur, at least as typical Loess, on the hills north of the Advance and Drum lowlands west of Whitewater. Between Whitewater and Drum postoffice the southern edge of these hills is covered with a yellowish clay, which resembles the residual clay of the region more than it does the Loess. This deposit does not occur on the more cherty hills beyond where Castor river enters the Advance lowland. Loess clays are well exposed in the railway cut at Puxico, but they thin westward and disappear near the edge of the lowland west of town. At Poplar Bluff there is no typical Loess. South of that place along the bluffs there is a yellowish clay, but no typical Loess.

The contact between the Loess and the underlying formations is an unconformable one. The gravels and underlying sands were extensively eroded, for the greater part of the upland had been reduced to practically its present condition, except of course those parts which were eroded later in forming the great lowland belts of the region. The gravel beds of Crowley ridge were eroded until they occurred in isolated patches, practically the same as those still existing, and the western part of the ridge was reduced to an undulating plain.

The submergence during the deposition of the Loess included the whole region south of the Ozark hills, except the tops of the gravel caps on Crowley ridge.

5. The Terrace Loam

The terrace loam included in the list of geological formations of the region, caps the Sikeston ridge from its southern end to within a few miles of Morley. It is a deposit of sandy brown loam varying from nothing up to twenty-five feet in thickness. It resembles the typical Loess of the Missouri valley and the Loess

terraces along that stream and the Mississippi. Its upper surface is about level and is therefore considered to be constructional in origin and later than the Loess. Its youth is shown also by the fact that it was not deposited until the region had been deeply eroded, after the deposition of the Loess. It is underlain by sands similar in character to those making up the southern part of the Benton ridge. The surface on which the loam was deposited was slightly uneven. A few low sand hills project through the surface of the loams, and others rise only to the surface of the latter, producing sandy spots or "sand blows."

This same deposit or a similar one caps some of the low ridges west of Morehouse, but usually as a thin layer.

6. The Alluvium

The alluvial deposits of the lowlands have been sufficiently described under the descriptions of the lowland belts. A recapitulation only will be given here.

The Advance lowland belt is underlain by sandy alluvium for a few miles west of the Mississippi river. Gradually this becomes covered westward by a cap of clay which reaches a maximum thickness in the vicinity of, and north of, Delta. West of Delta the clay cap thins and finally disappears at the western side of the "Old Field." Then succeed a few miles of alternating clay ridges and sandy sloughs to the Chalk Bluff road.

Between this and Brownwood the alluvium is sandy, though capped in places by a less sandy loam resembling the terrace loam of the Sikeston ridge. From Brownwood westward and southwestward the clayey alluvium is continuous, except on the few low sandy islands described above (page 6).

The Morehouse lowland is underlain by sandy alluvium, except in the neighborhood of the Whitewater and Castor rivers where the sand is capped by a layer of clay.

The alluvium of the Mississippi flood plain or the Charleston lowland is all sandy like the alluvium of that stream everywhere south of the mouth of the Missouri.

C. GEOLOGICAL HISTORY OF THE REGION

The geological history of the region, so far as it is recorded in the rocks now outcropping in it, opens with the deposition of the Ozark limestones of probable Lower Silurian age. This phase of the region's history continued without any important break through the Trenton and with great probability also through Upper Silurian time. With less probability it continued through Devonian times and may possibly have ended after Carboniferous times, closing with the folding of the Appalachians and their trans-Mississippi extension or representatives, the Ouachita mountains of Arkansas. This long period of deposition was followed by a long period during which these rocks were uplifted and profoundly eroded. Then followed a second submergence and the deposition of the Tertiary shales and clays, followed by a second uplift and period of erosion, which, however, was not of so long duration as the first. A third submergence followed, and the Lafayette sands and clays were deposited, followed, with very short if any interval, by the deposition of the Lafayette gravel bed. third uplift followed, during and after which the previously deposited beds were greatly eroded, the gravel bed disappearing from the whole area, except a few isolated patches. A fourth depression followed, and the mantle of Loess was deposited over the uneven surface, filling the valleys and building the land up nearly to its level before the preceding erosion. Then followed uplift and erosion to the present condition of the country. During the last stage in the history of the region slight oscillations have occurred producing terraces, but they were not sufficient in amplitude to interrupt the continuity of the cycle.

A tabular statement of the foregoing is as follows, beginning with the lowest phase:

- 1. Deposition of Palaeozoic limestones.
- 2. Erosion interval.
- 3. Deposition of the Tertiary clays.
- 4. Erosion interval.
- 5. Deposition of Lafayette sands.

- 6. Erosion interval (?).
- 7. Deposition of Lafayette gravels.
- 8. Erosion interval.
- 9. Deposition of Loess.
- 10. Erosion interval.
- 11. Deposition of terrace deposits.
- 12. Erosion interval still in progress.

D. GEOLOGICAL STRUCTURE

The structure of the region is extremely simple. The Palaeozoic beds dip southeastward at a low angle and without folding. The younger beds have a very slight southward dip. The dip of the Palaeozoic beds is a result of deformation, that of the younger beds, probably of deposition only.

PART II. EXPLANATION OF PHENOMENA

CHAPTER III

THEORIES OF LOWLAND FORMATION

1. General Statement

The existence of such a large area of flat land, its distribution in broad continuous belts with sharp steep slopes on both sides, and its sudden expansion from the much narrower belt of flat Mississippi river bottom at Cape Girardeau, have attracted a great deal of attention ever since the first occupation of the region by The fact that these belts are not followed continuously by any stream and are not even crossed by streams large enough to be referred to as the cause of the lowland belts, has further increased this interest. They are like river valleys, but the rivers cross them rather than follow them. The whole area has always been considered as one that was separate and distinct from any other part of the State—as an area unique in itself. Because of the large area of undrained or poorly drained land in these belts the whole region is familiarly known as the swamps of southeastern Missouri. The description here given shows, however, that they are not swamps like the areas of water-soaked or liquid vegetable matter occurring in northern latitudes. They are mere bottom lands, in which the sandy alluvium may be reached anywhere, under but a very few inches of rotten leaves and twigs. The inhabitants of the area have sought their own explanations of the facts, though they are not based on a comprehensive view of the whole area and the relations of the various

parts to each other, nor often on a detailed study of the facts in any locality.

The Mississippi river is the most powerful continuously operating force within the experience of the inhabitants. They regard the lowlands, therefore, as in some way the product of the action of the Mississippi river, or rather they consider the lowlands as old valleys of that river. With many of them a second factor enters into the reckoning, namely, the earthquake shocks of 1811 and 1812. A large part of the area is supposed to have sunk at that time, though the amount of sinking has not been agreed upon. The relative effect of these two forces has never been clearly determined by even the most strenuous advocates of the earthquake's effectiveness.

The theory most often encountered among those who do not give the earthquake hypothesis much credit, is about as follows: At some time in the past, the Mississippi river was much larger than it is at present. On reaching the northern border of the coastal plain at Cape Girardeau it separated into several branches or distributaries, among which three were by far the largest. One of these turned westward and southwestward by the way of the Advance lowland, another turned southward from the latter by way of the Morehouse branch of the Cairo lowland, and the third turned slightly southeastward by way of the existing channel of the Mississippi. These, however, were the courses of the main channels of the stream only, and in exceptionally high water stages the whole area was submerged. The river under such conditions was heavily loaded. It deposited sand, forming sandbars then as now, between the main current lines. Crowley ridge, Bird, Lost, Cow, and Ringer hills, and Benton ridge are some of these sandbars that were deposited in this flooding river. Later the volume of the river diminished, and in shrinking to its existing dimensions it abandoned all the channels except the one by Commerce.

A fatal objecton to this theory is the fact that the beds of rock, making up Crowley, Benton, and the other ridges and hills, are fragments of beds that were once continuous over the whole intervening area between the ridges, and have been removed by erosion in the lowland belts since their deposition—when Crow-

ley ridge was formed the whole county was built up to its level, the lowland areas as well as the ridges. The beds making up these ridges are of widely different ages, with intervals between the times of the formation of some of the contiguous beds that are far greater than the whole time that has elapsed since the birth of the Mississippi river. The beds in sand bars never had any greater extent than the area of the sand bar. They are all of the same geological age also. The material of which these hills and ridges are built is widely different as a whole from that of river sand bars. There are beds of solid limestone, pure sand, black clay, coarse gravels, and loam—all of considerable thickness and evenly distributed in layers, not mixed together.

2. Literature

Three interpretations based in each case on imperfect knowledge of the facts have been given in scientific literature. Two of these are mere statements of the succession of events, that were supposed to have taken place, without an account of the facts or the arguments supporting the statements. They are incidental statements in a literature that is concerned chiefly with other subjects. One of these is by Branner, the other is by Call. The third interpretation is one advanced by the writer several years ago, and was based on the facts that were available at the time.

Branner's statement is as follows: "The Mississippi river, instead of having always cut through the solid rock as it now does southeast of Cape Girardeau, formerly flowed west of Crowley ridge, having a southwest direction at Cape Girardeau and flowing through the lowlands. It flowed past Delta, Poplar Bluff, and Neelysville, and joined the Ohio somewhere south of Helena; subsequently it cut through Crowley ridge at Chalk Bluff and flowed down the St. Francis valley, and still later it cut the ridge between Bloomfield and Benton, Missouri, and joined the Ohio south of

Report on Crowley Ridge. Geol. Surv. Ark., Vol. II. for 1889, p. XIV.

² Report on Crowley Ridge. Geol. Surv. Ark., Vol. II. for 1889, p, 128.

³ Boston Society of Natural History, Vol. XXVI, p. 479.

New Madrid.... While the Mississippi flowed through the Arkansas valley to the east of the ridge, the Ohio was washing down similar beds on its opposite side, and it was not until towards the close of the glacial epoch that the old channel southwest of Cape Girardeau was filled up and the Mississippi cut through the hills to the southeast and joined the Ohio at Cairo."

The outline presented by Mr. Call is a much longer one, and is based on a study of the geology and topography of Crowley ridge in Arkansas. It includes the geological as well as topographical history of the region since the beginning of Tertiary time, and in a much abridged form is about as follows: (1) Deposition of the Tertiary clays. (2) Uplift and erosion of valleys by the Mississippi river. The river separated into two main channels just south of Cape Girardeau, one running east, the other west of what is now Crowley ridge. The lowland described in this paper as the Advance lowland was eroded at this time. The Mississippi finally abandoned the valley west of the ridge and flowed east of it. (3) Depression and deposition of the Tertiary sands by currents which flowed along the shores of the new gulf. (4) Elevation and erosion of the sands. The harder parts of the bed were left as a long series of hills not much above the level of the surrounding country. (5) Submergence and the deposition of a bed of gravel. (6) Elevation, but no statement as to the extent of erosion taking place as a result of this elevation. (7) Submergence and deposition, first deposition of glacial age in the region. (8) Uplift and erosion of the great trench of the modern Mississippi. (9) Later glacial submergence, or at least a period of deposition during which the Mississippi trench was partly filled. (10) Partial excavation of the trench of the Mississippi.

The third interpretation referred to above was offered in 1895 by the writer and was based on a study of the geological and topographic literature and maps of the region then in existence. For that part of the region included in this report, the part in which the origin of the phenomena must be sought, there was neither literature nor maps except an extremely imperfect geological map issued by the Geological Survey of Missouri. No sort of topographic map of this part of the lowlands was in existence.

The interpretation was based therefore chiefly on Call's maps and report cited above, and on the general map issued by the Mississippi River Commission.

According to these maps the main lowland belt that is not now followed by a large stream, the Advance lowland, lay along the border between the coastal plain deposits on the one hand and the Palaeozoic highlands on the other. None of the coastal plain deposits were shown north or west of this lowland, and none of the Palaeozoic south or east of it, except two ill-defined patches, one just north of Commerce and another near Puxico. Nothing was known of the shape of the floor or of the sides of that part of this lowland lying north of the Missouri-Arkansas state line. Morehouse branch of the Cairo lowland and the gorge above Commerce were not considered important factors, since their features were not known. On the basis of such facts as could be determined the Advance lowland was explained as an inner lowland, developed by the combined erosion of small tributaries of many transverse streams, along the strike of soft rocks, in the usual manner in which such lowlands are developed, for example, like the lowland belt along the inner border of the Atlantic coastal plain between Philadelphia and Cape Cod. It was, in fact, considered a part of this same lowland belt, occupying as it does a homologous position. Crowley ridge was considered a cuesta, the eastern part of whose structural plain had been eroded away by the Mississippi river. That river, however, it was thought, had had nothing whatever to do with the excavation of this lowland belt.

The statement made by Dr. Branner is no attempt to prove that the events recorded actually took place, much less to show how they were produced. It is, in fact, merely a statement of the popular view and lays no claim to scientific completeness. It is, as will be seen further on, chiefly the same as the interpretation of the phenomena given in this paper.

The explanation offered by Mr. Call is more than an expression of the popular view. It is an attempt to interpret the phenomena on the basis of facts observed in the study of the locality. It claims credit as a scientific generalization based on facts gath-

ered at first hand by the author. There are, however, several serious difficulties in the explanation offered. The order of events can not have taken place as outlined by him. The chief difficulty and one wholly irreconcilable with the facts, is the placing of the erosion of the Advance lowland belt prior to the deposition of the Tertiary sands and gravels and of the Loess. Had this order of events taken place, the lowland would have been completely filled by these deposits. The maps accompanying this paper show conclusively that the Loess, gravel, sand, and clay were all cut alike by the force which eroded the lowland. The whole series of lowland belts is younger than the Loess. There is nothing known of the pre-glacial topography of the region, except that the western part of the lowland region was then a lowland; but that was filled by the Loess, and the existing lowland belt excavated in that and the underlying rocks. The paper makes no attempt to show the method by which the river abandoned an old course and adopted a new one across a former divide.

The study of the region since the publication of the third interpretation referred to above has shown that the position there taken is, so far as its application to this region is concerned, wholly untenable. The Advance lowland is not an inner lowland, Crowley ridge is not a *cuesta*, the transverse drainage of the Advance lowland is a very recently established condition, and the Mississippi river has very recently occupied the gorge between Grays Point and Commerce. With accurate geological and topographic maps at hand it would not have been difficult, by the method adopted in the preparation of that paper, to have discovered the origin of the Advance lowland and possibly of the others also; but to have determined the whole succession of events and the processes operating to produce them would have been more difficult and probably impossible by the methods of library study alone.

The geology and topography of the Advance lowland could not have attained their existing status except through the operation of a force that was continuous and of essentially equal intensity throughout the whole length of its course. The width of the belt varies, but is in perfect sympathy with the depth and character of rock removed. The floor of the lowland is not uneven like the surface of coastal plain lowlands, but is flat, and the highlands on either side drop to the lowland level in steep bluffs.

The same statement as to unity may be made concerning the Cairo lowland. The uniform trend of the bluffs bordering its northern side from east of Commerce westward and southward to the south line of the area, could have been produced only by one force that was operative along the whole line of bluffs continuously, simultaneously, and with uniform strength. The forces producing the two subdivisional lowlands of this belt operated in a north-south direction and therefore across the trend of the force producing the main lowland. These forces have not modified the Cairo lowland so far as its area or boundaries are concerned. They have merely deepened certain parts of it.

3. Possible Processes Producing the Lowland Belts

Geographers are familiar with three processes that produce lowland belts under the proper conditions. They are: First, subsequent erosion by the small tributaries of larger streams which flow across the outcrop of a series of beds of soft rocks; second, parallel faulting and the collapse of narrow strips between adjacent faults; third, erosion, by rivers and creeks, and subsequent abandonment of their valleys.

The application of the first process to the lowlands of southeastern Missouri has been shown above to be untenable. It needs no further discussion here.

The second process is well known to have operated in many places over the earth's surface, particularly in Europe. The Rhine lowland between Bingen and Basel is due to this process, and so also is Das Ries, a somewhat circular area in the eastern part of the Jurassic plateau of South Germany. The Germans name such features gräben. In such cases the top formation in the floor of the lowland is the same as the top formation on the adjacent uplands. Erosion subsequent to the faulting would certainly remove it from the uplands and cover it in the lowlands with debris from the adjacent uplands, but in the case we are considering there has been no significant erosion of the uplands nor filling of the lowlands since the lowlands were formed. There has not even been

time for the formation of any considerable amount of talus at the foot of the cliffs. The surface of the lowland would duplicate, also, in details of relief, that of the adjacent uplands. Except in case of an extremely uniform amount of faulting, the general level or slope of the lowland would not be uniform. Boring also beneath the surface of the lowland would reveal the same succession of formations as were exposed in the edges of the fault scarps.

The phenomena of the lowland belts fail to agree with the scheme of necessary consequences as outlined above, not only as a whole, but they fail to agree in any single instance. The lowland surfaces slope uniformly in one direction. They do not agree with the uplands in details of relief, for they have very little detail, nor in the succession of formations downward.

The third possibility is the only one left. By the method of exclusion we should be able to prove that these lowlands are old river valleys if we could show that we had exhausted all the possibilities. This would probably be more difficult to prove than to find additional evidence to add to this which will show that the lowlands are river valleys. Such evidence is abundant and conclusive.

- (I) The width of river valleys, after the streams have passed the earliest stages of youth, is in sympathy with the hardness of the rock in which the valley has been cut, and with the relative thickness of the hard and soft beds which were cut through at any point. The Advance lowland meets both these conditions perfectly. South of where the St. Francis river enters it the lowland is wide, and the rocks which were removed were soft sands and clays. North and east of this the rocks in the lower parts of the bluffs on both sides of the belt are hard, but the thickness of hard rock cut is greatest exactly there where the valley is narrowest—west of Puxico.
- (2) The trend also of river bluffs is characteristic. They do not often follow a straight line for any great distance, but the deviation from such a line is gradual. They are disposed in long swinging curves, and their line of trend is a smooth one if not straight. The topographic map accompanying this paper shows that the bluffs of the Advance lowland possess this character in a high degree. The curves between Rock Levee and Whitewater and between Greenbrier and Wappapello are good illustrations.

The curve of the Cairo lowland from Commerce by way of Benton, Idalia, and Dexter to the south line of the map is another good illustration.¹

- (3) Cross profiles of the lowlands are typical profiles of mature river valleys. The bluffs on each side are steep, and the plane of their slopes makes a sharp angle with the plane of the valley floor. The cross-profile line of the floor is level.
- (4) The deposits underlying the floor are typical alluvial deposits, not uniform everywhere, but the variations are easily explained.
- (5) The longitudinal profile of the lowland floors shows a persistently uniform slope southward, at about the rate of the flood plain of large heavily loaded rivers.
- (6) The lowlands are continuous with the existing valleys of the Mississippi and Ohio rivers and their widths and shapes agree with them.

The features of the lowlands and their relation to the neighboring river valleys furnish unmistakable proof that they are old river valleys that have been abandoned (except the Charleston lowland) by the rivers that eroded them.

4. Age of the Lorelands

All the formations, except the alluvium, were eroded by the streams which formed the lowlands. They are, therefore, younger than the Loess. Chamberlain and Salisbury have shown that the gorges of the large rivers of the central part of the United States were eroded in the interval between the first and second glacial epochs. These valleys are presumably of the same date, since it is extremely improbable that they should have been eroded for this small area alone. They are also demonstrably of the same or later

¹The notch in the east side of Crowley ridge at Zeta is not a part of this curve. It is a part of the broad gap lying between Benton and Crowley ridges and was formed after the formation of the northern and western curving border of the Cairo lowlands and by a different eroding agent. It was formed by the stream that eroded the belt connecting the Morehouse and Advance lowland belts.

age than the gorge of the Mississippi above Cape Girardeau, which, according to the authorities cited, is of interglacial age. This interpretation agrees also with the relation of the valleys to the geological formations of the region. The Loess, a deposit of Pleistocene or glacial age, occupies the same position, with one doubtful exception, with respect to the valleys, as do the older formations. All were excavated alike. There were valleys in existence immediately preceding the Loess deposition, but they were not the great valleys here discussed. The evidence is clear that the western part of what is now Crowley ridge was well worn down before the deposition of the Loess, but the significant fact is that the Loess is the surface formation over all this low region while it is not the surface formation in the lowlands.

It has not been identified beneath the alluvium in the few borings that have been made in the lowlands. A mile south of Lakeville there is a slightly undulating strip lying north of the steep bluff of Palaeozoic rock forming the southern boundary of the lowland, which is composed of a Loess-like clay though more like the terrace deposits of Sikeston ridge than the Loess of the adjacent uplands. The surface of this strip of country does not rise more than twenty feet above the sandy alluvium of the lowland in the vicinity of Advance. While no wholly satisfactory explanation of the existence of this strip has been reached, yet the evidence elsewhere of the post-Loess age of the valleys is considered as sufficient to warrant a corresponding conclusion here, with the recognition of the fact that more careful study of the region may modify it slightly. One thing is certain, the lowlands were occupied by large rivers after the deposition of the Loess. Professor Salisbury 1 places the deposition of the Loess of the region in the second episode of the first glacial epoch.

The valleys were eroded much deeper than at present and later filled by deposition of alluvium. The filling, which was a phenomenon extending over a large part of the Mississippi valley region, took place, according to Chamberlain, during the second glacial epoch. The coarse, sandy character of the filling in these val-

¹Report on Crowley Ridge. Annual Report for 1889, Vol. II, p. 23.

leys accords with this view. It differs from modern alluvium of the region in both these respects.

As will be shown later, the various lowlands are not of the same age. This statement can hardly need proof. A slight knowledge of river life will satisfy anyone that, although rivers may spread out into several channels when young, they do not continue in this condition to maturity, the stage reached in these valleys before they were abandoned.

The Advance and Cairo belts are contemporaneous. The modification of the western half of the Cairo belt and the erosion of the broad belt of lowland between Crowley and Benton ridges, forming the Morehouse lowland, were produced later, while the Charleston lowland has never been abandoned. The Duck creek lowland was probably formed while the Advance and Cairo belts were being eroded.

5. The Eroding Agent

The stream or streams which eroded the lowlands were the streams that now drain the region. They are so recent in age that no complete rearrangement of drainage can have taken place since their erosion. If rearrangement had taken place, it would not have been confined to the area of the lowlands, but would have reached over a large part of the Mississippi valley. There is absolutely no evidence for such rearrangement. These lowlands must have been eroded either by the Mississippi and Ohio and then abandoned by them, or else by the smaller streams such as Whitewater, Crooked Creek, Castor, St. Francis or Black rivers. The arguments against the latter alternative are abundant and conclusive. An important one is that these streams are wholly incompetent. Their valleys, where they open out into the Advance lowland, are less than a mile in width. Whitewater and Castor open into this lowland where it is several times as wide as the width of their combined valleys and excavated in exactly the same kind of rock. The same is true of the St. Francis and Black. A short distance south of where they enter, however, the character of the material excavated

changes materially. This does not affect the valley at the points of entrance. The material carried by these rivers is entirely different from that which is deposited in the main valleys. These rivers drain a region that was not invaded by the ice during glacial times, so that the material they have carried since the cutting of their valleys has not changed materially. The main lowland has an entirely different trend, also from that of the valleys of the small rivers. They enter it at right angles to its trend. Furthermore, the Advance lowland is continuous from the existing valley of the Mississippi and of such uniform width and shows so complete an absence of cuspate bluffs that it could not have been produced by the coalescence of the valleys of several southwardly flowing streams. The same arguments apply to the Cairo lowland as well.

The Advance lowland was eroded by the Mississippi river and the Cairo lowland by the Ohio. The former is continuous with and of accordant width with the Mississippi trough above Cape Girardeau. Its course at its eastern end is part of a curve that commences in the Mississippi bluffs above and on the opposite side from Cape Girardeau. The existing channel of the Mississippi leaves the valley in a course at right angles with it at Grays Point, about the middle of this curve, but the gap is not wide enough to break the evident continuity of the bluff-curve crossing it.

The bluffs of the Cairo lowland are continuous with those of the valley of the Ohio above its existing mouth and have no corresponding relation with the Mississippi bluffs. The southern end of the Benton ridge is continuous with and in line with the southern end of the upland of southern Illinois east of Commerce. The Mississippi here crosses this bluff line at right angles. The Cairo lowland from Commerce southward and southwestward is the valley of the Ohio river, which has been invaded recently by the Mississippi. It has been changed slightly since the invasion, but only in a comparatively narrow belt. The Ohio continues to flow, therefore, in its original valley.

The formation of the Morehouse lowland belt by slightly deepening the western side of the Cairo belt, and the erosion of the broad belt connecting it with the Advance belt, were accomplished by the Mississippi river after it had abandoned the western part of the Advance lowland, and before it adopted its existing course from Grays Point by Commerce to New Madrid.

The Mississippi river, therefore, originally turned westward at Cape Girardeau and followed the course now occupied by the Advance lowland belt. While it occupied this course, the Ohio was at work eroding the Cairo lowland. The latter river worked wholly in loose sands and clays while the Mississippi worked chiefly in hard limestones. The Ohio, therefore, was able in a given time to erode a much wider valley than the Mississippi. During this time Crowley and Benton ridges formed a continuous ridge and drainage divide, extending from Helena, Arkansas, northward into the uplands of Illinois. Subsequently the Mississippi river abandoned the western part of the Advance lowland, by finding a way southward from where Delta now stands to the valley of the Ohio. At a still later period it abandoned this valley and occupied its existing course from Grays Point into the Ohio valley at Commerce.



CHAPTER IV

ORIGIN OF SOUTHEAST MISSOURI LOWLANDS

The Mississippi river has abandoned two valleys and now occupies a third. This is a case, therefore, of the abandonment by a large stream of a part of its valley in favor of that of a smaller stream. The Mississippi has been captured by the Ohio twice in succession.

1. General Processes of River Capture

The process by which rivers entrench themselves is well understood. The shifting of channel made by a mature stream in a broad flood plain is a matter of common occurrence on the flood plains of large streams. The change, however, by which a river shifts, not merely its channel, but its whole course, abandoning a part of its valley and acquiring a new one, is not so common an occurrence. Rivers, after having once entrenched themselves, can not readily get out of their trench. They can not lift themselves unaided over the valley sides. This is especially the case with large streams. Change of valley by small streams in favor of that of a larger one is a phenomenon familiar to all geographers and geologists who have devoted any attention to the processes of geographical development. The whole subject of river piracy concerns itself with this process. The capture of a large stream by a smaller one is, however, a phenomenon not so well known. captures usually take place in mountainous regions and in localities where the rocks have been extensively folded, and where there are widely varying resistances in the rocks of a small area. Stage in cycle also has been considered an important factor, it being generally agreed that river capture takes place more often during the early part of the second cycle of development than at any other time.

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None of these conditions obtains, in the region under discussion, except possibly the last one, and in order that it may be effective the others must be presupposed. The rocks are not folded, and they are all of about uniform resistance. Furthermore, in this region the capture, or change of valley, call it capture or not, took place long after the river had reached grade. It had also aggraded its valley many feet after reaching grade, before it finally abandoned it. Captures of the kind above referred to, taking place in mountainous regions, usually occur before the captured stream has reached grade.

The occurrence of a kind of stream capture, after the captured stream has reached grade, has been described from a few places in Missouri.1 It was brought about by the lateral sapping of two adjacent streams, thus cutting through the upland separating them. The only cases where the process has been observed have been due to the sapping on the convex sides of meanders in streams strongly characterized by such, and the stretch of valley abandoned is only a very few miles. The length of valley abandoned by the first change of the Mississippi is more than two hundred miles, and by the second about fifty miles. Furthermore, in such cases, the two valleys must become confluent at the point of capture, and the upland must be reduced to cusps on each side of the gap. The width of the neck of upland through which the changes in the Mississippi were made was in the last case about eight miles, and in the first about the same of high land, though there was a much longer strip of lowland beyond the high belt.

Another process, a slight modification of the last one, was described in the paper referred to above and was considered as having operated in the last change of the valley of the Moreau river, near Jefferson City, Missouri. The valleys of two large streams are separated by a narrow belt of upland. A small stream flows into one of them, heading on the upland between the two main streams. That one of the larger streams into which the small stream does not flow, saps the bluff on the side nearest the other large stream, gradually working toward the head of the small tributary. By con-

¹ Cote Sans Dessein and Grand Tower. Am. Geol., Feb. 1898.

tinued sapping it finally cuts off the head of the tributary, then continuing cuts off more and more of it, reaching a lower and lower level of its valley, thus deepening the gap between its valley and that of the other large stream. It finally reaches a point where it can shorten its course by flowing into the other stream through the beheaded trunk valley of the tributary, abandoning the lower part of its own valley. In the case cited the captured stream or the stream which made the change of course, was the smaller stream. The course through the ridge was a more advantageous one on account of the lower level of the larger stream.

The largest stream within an area does not always have the lowest valley floor, especially when both streams are very large and drain regions of varying climatic and geological character. The Missouri river flood plain, for example, is about 750 feet above sea level at Kansas City, a distance of about 275 miles above its mouth, while the Mississippi flood plain at Burlington, Iowa, about an equal distance above the junction of the two streams, is only about 545 feet above sea level, 200 feet lower than the Missouri. Yet the Missouri is the larger stream. If these valleys lay within ten miles of each other at this distance above their mouths, the temptation for the Missouri to get into the valley of the Mississippi would be very great. The stream which carries the heavy load is the one that is held up on a high level, as compared with that of the one with a small load or with a load of finely divided material.

2. Conditions Favoring Capture in Southeastern Missouri

Both the Mississippi and Ohio rivers are large streams and drain areas of greatly varying geological and climatic characters. At the present time the Mississippi carries much the larger load of material and also material that is much coarser than that carried by the Ohio. They have both reached grade, yet each has graded itself in accordance with the amount and character of load it carries. The Mississippi, therefore, has a steeper grade than the Ohio. The elevation of the Mississippi flood plain at Cape Girardeau is about 340 feet above sea level, and at St. Louis it is about 425 feet. The Ohio flood plain at Cairo is about 315, and at Evansville, Indiana,

about equally distant, about 365 feet above sea level. In one case there is a difference in level between the two places of eighty-five feet, in the other of fifty feet.

The distance from Cape Girardeau to Helena, Arkansas, where the Mississippi originally flowed into the Ohio is a little more than twice as far as that from Cape Girardeau to St. Louis. If the same relation held originally as now, there was in the neighborhood of Cape Girardeau, before the change of course by the Mississippi, a difference in level of about sixty feet. It can not be demonstrated, very probably, that this relation did obtain or has obtained at all times, for during the maximum extension of the ice during the second glacial epoch both streams were avenues of discharge for a large amount of glacial waste. The ice disappeared from the drainage basin of the Ohio much earlier than it did from that of the Mississippi, and the former was able, therefore, to do some work toward adjusting its grade to existing conditions before the Mississippi was relieved of its burden of ice ground material. The Mississippi, however, has never been relieved of the burdensome load that is dumped into it by the Missouri, so that the change of grade that took place on the Mississippi was not so great as that on the Ohio after the retreat of the ice. On the other hand, if the change of course took place soon after the second glacial period, this readjustment was not an important factor. Allowing a considerable margin for the unknown factors, it seems quite evident that there was a difference of level of several feet in the two valleys at the southeastern corner of what is now the State of Missouri, at the time of capture, giving considerable inducement to the Mississippi to take advantage of all opportunities to abandon its own valley and occupy that of the Ohio.

3. Methods of Capture in Southeastern Missouri

The last process described above is the one that has operated in the region under consideration. The captures took place as a result of the varying degrees of hardness, though this did not retard the captured stream. The Mississippi, the captured stream, eroded its valley in hard rock, the Ohio, the capturing stream, in soft rock. The Mississippi, however, was not held at a higher level than the Ohio, thus making capture possible, because of the nature of the rock. The capture did not take place until the Mississippi had reached a grade determined wholly by other factors than the hard rocks in which it had cut its valley. It had not only reached grade, but it had opened a valley three to five miles wide, and had then aggraded it at least a hundred feet. It was only indirectly, through its influence on the development of the minor drainage, that hardness of rock affected the hydrographic status in the lowland region.

The minor drainage of the whole of what is now Crowley and Benton ridges and apparently of the belt between them, was originally westward or northwestward. The divide between the Ohio and the Mississippi in the early stages of their development lay east of the present eastern side of Crowley ridge. All the larger streams now draining Crowley ridge have been beheaded by the widening of the Cairo lowland. This was done before the first capture of the Mississippi took place. It has been shown already that the Mississippi river has had nothing to do with the fashioning of the eastern bluff of Crowley ridge, south of Bell City, and of the south side of Benton ridge. The Ohio dealt with soft rocks and could open out a wide valley.

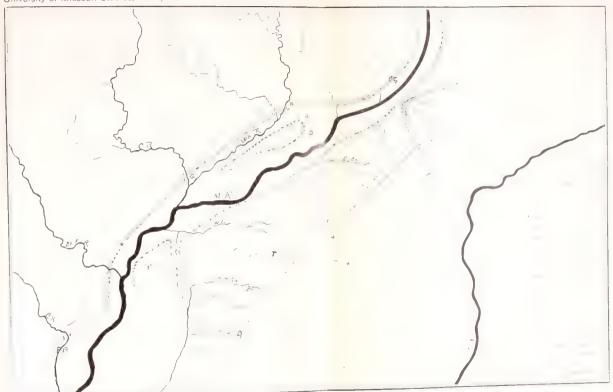
While the Ohio was opening this belt and the Mississippi was opening out the Advance lowland, Caney creek flowed northwestward into the Mississippi. Throughout its lower course it had to cut the hard limestones of the Ozark series. Valley deepening under such conditions was rather slow, so that the middle part of its course, although flowing over the soft sands of the Tertiary, was held well above the level of the Mississippi flood plain and still farther above that of the Ohio to the south. The hard limestones, however, dipped beneath the level of the Mississippi flood plain, entirely out of the way of small streams, only a very few miles south of the river. It was only the lower course of Caney creek that had to cut hard rock. A small stream (X, Plate IV), growing headward from the Ohio flood plain, at some point between the present position of Morley and Cow hill, had no such difficulty to contend with. It grew rapidly both on account of the rock in which it

worked and of its short steep course. Growing backward nearly at right angles to the course of Caney creek, it succeeded in tapping the latter above where it entered the hard rock and in offering it a course which avoided that difficulty. Thus strengthened it was able to deepen rapidly the upper part of the Caney creek valley. On account of the lower level of the Ohio flood plain the pirate was able soon to sink its valley, at the point of capture, to a level as low as that of the Mississippi. Although the tapping may have taken place north of the line of disappearance below its grade-level of the hard bed, yet there was so thin a layer of that to be cut that the work was soon done. Plate V is an attempt to map the drainage of the region as it existed about this time.

The slope of this valley, southward from the point of capture, was greater than the slope of the valley of the Mississippi. It was in position, therefore, to offer to that stream a steeper and shorter course than it possessed, provided the Mississippi could gain access to it. This was effected by the sapping of the ridge between the Mississippi valley and that of the captured stream. The curve in the Advance lowland, between Advance and a point a few miles above Cape Girardeau, is such that a vigorous stream, flowing in it southwestward, would sap its southern bluff. The Mississippi, while still occupying the Advance lowland, gradually pushed its southern bluffs backward until it finally cut into the valley of the diverted Caney creek, and immediately occupied it.

The date of the capture and abandonment can not be fixed nearer than to say that it took place after the close of the first glacial epoch. There has been some boring in the bottom lands, but the results are not sufficient to enable one to fix the date of capture more closely by means of correlating the filling of the valleys here with the same events elsewhere in the country. The Advance lowland seems to have been originally deeper than now and later aggraded, before the Mississippi abandoned it. Throughout its whole extent the undoubted Mississippi river sandy alluvium is encountered either on the surface or within a depth of twenty feet.





Drainage of the region after the capture of Worf Caney and the creeks and before the first region of the Miles in

4. Capture of Wolf Creck

Wolf creek, which flows into Castor river near Leora, was originally one of the westwardly flowing tributaries of the Mississippi. It entered the latter stream somewhere in what is now the Advance lowland, through the existing valley of Castor river west of Leora, probably a little north and west of the position of Headquarters. Like Caney creek its middle and upper parts were in soft rock, and its lower course in hard rock. It entered the latter near where Leora now stands. While Caney creek was being tapped by stream X (Plate IV), Wolf creek was being treated in a similar way by stream Z.

In this case the advantage arose wholly from the difference in character of rock. Stream Z grew headward from Lick creek, which was a tributary of the Mississippi river and not of the Ohio, as was X. Z had only a short distance to work, however, in order to reach Wolf creek, and effected the capture early. Wolf creek became then a tributary of Lick creek, which it reached through what is now the Duck creek lowland belt. By the energy of the enlarged stream this belt was eroded. While it was being done the Mississippi, by sapping the southern side of its valley, approached nearer and nearer to the Wolf creek valley at the point of capture. It finally cut into it, but since Wolf creek was itself a tributary of the Mississippi, its valley could not be lower, nor even so low as that of the latter, so it could offer no more advantageous course to the master stream. Instead, therefore, of the Mississippi being captured, it recaptured from Lick creek its former tributary, Wolf creek. Duck creek lowland is, therefore, not an old valley of the Mississippi nor of Castor, but of Wolf creek. During all this time Castor river flowed into the Mississippi. This capture of one of the original westwardly flowing streams is probably the first one that took place, and the cutting into the enlarged valley of the captured stream certainly took place before the capture of the Mississippi by the Ohio river through X creek.

5. The Mississippi and Whitewater Rivers

Whitewater river, after its junction with Crooked creek near the locality of the town of Whitewater, flowed westward through the Drum lowland belt and joined the Mississippi in the vicinity of Greenbrier. After having reached grade, its load was rather light, so its slope was not great. It flowed in a valley excavated from end to end in the resistent Ozark limestones. It could not be reached by headward growth of a stream working on soft rocks, because there were no such beds north of the Mississippi. The northward curve of the bluffs west of Cape Girardeau indicates that the Mississippi river for some time before its capture, was turned toward the northern side of its valley. The corresponding curve in the north bluff of Benton ridge indicates the same thing. The Mississippi seems, therefore, to have swung southward past the locality of Cape Girardeau, sapping the eastern side of the valley, then southwestward to near the locality of Kelso, then it was deflected across the valley to the northern bluffs. It worked westward by sapping, soon cutting a notch which deflected it, thence directly southward again. It continued to sap westward, pushing the bluff backward as a shoulder, until it cut into the Whitewater valley. It may for a while have occupied the Whitewater valley either wholly or in part. This is indicated by the fact that the Drum lowland is broader than the combined valleys of Whitewater river and Crooked creek. It was probably widened by an arm of the Mississippi. This took place evidently before the first capture of the Mississippi. It was taking place while Wolf creek and Caney creek were being captured and their valleys deepened.

6. Capture of Castor River

Castor river now crosses the Advance lowland, then enters and crosses Crowley ridge in a valley no wider than the size of the stream warrants. This can not have been its original course. When the Advance lowland was occupied by the Mississippi river, Castor river flowed into the latter stream, and its waters turned

down the west side of Crowley ridge. It manifestly could not have crossed the Mississippi and followed its existing course. The latter is the result of a change subsequent to the abandonment of the Advance lowland by the Mississippi. It seems that, for a long time after this abandonment, Castor continued to follow the Advance lowland. That part of the Advance lowland lying between the St. Francis river and Castor, and known as Mingo swamp, is a low flat plain, with a surface deposit like that now being deposited by Castor and unlike the old Mississippi alluvium at Advance. There are no streams tributary to this belt between the two streams named that are large enough to form a deposit uniformly over the whole valley. They are all mere rivulets and could do nothing more than build flat alluvial cones, extending out into the plain from the bases of the bluffs, while the central belt would remain unaffected. The clay alluvium has no such distribution here. It could have been arranged only by a stream of considerable size, which had the ability to remove the top of the old sandy deposits and redeposit clay alluvium in its stead. The lowland, as has been stated above, slopes southwestward. The river must have flowed in this direction unless land warping has taken place in very recent times, of which no evidence is yet at hand.

Mingo creek is nothing more than an abandoned river channel that receives the drainage which runs into the lowland. It is about as wide as the channel of Castor river would be, after the banks had fallen in slightly. The water in this old channel has a very slow southwestward flow. It is as new apparently as many of the abandoned ox-bow curves along the existing course of this stream. While following this course, Castor river was held at a disadvantageous grade on account of the great distance it had to flow before reaching the Mississippi. A shorter course into the lower lying Morehouse lowland belt would be much more advantageous. We have already seen that in all probability Wolf creek was early captured by a northwardly growing tributary of Lick creek, and after excavating the Duck creek valley, was recaptured by the Mississippi. After the abandonment of the Advance lowland, Wolf creek became a tributary of Castor river, while the latter continued

to follow the Advance belt southwestward. During all this time Wolf creek had opened a valley down to a low grade, across the hard limestones between Leora and the Advance lowland west of it, along the existing valley of Castor river. A small stream (T, Plate V), growing headward along the existing valley of Castor river between Leora and Zeta, working in the soft beds of the Tertiary, was able to tap Wolf creek near where it entered its narrow hard rock valley, and to offer it a steeper course to the Morehouse lowland and one in which hard rocks were avoided. It is probable, however, that the hardness of the rocks had little to do with the matter. Wolf creek was large enough and had occupied this valley long enough to have reduced the hard rocks to grade before it was turned eastward. The advantage gained because of the steeper slope seems to have been the determining factor.

This change left an abandoned valley of low grade only a few miles long, one end of the river channel in which communicated with the channel of Castor river, the other end with Wolf creek. Castor lay in the higher Advance lowland, Wolf creek flowed into the lower Morehouse lowland. During high floods in Castor river the flood waters probably found an outlet through this channel into Wolf creek and thence to the Morehouse lowland. This in time turned Castor in this direction.

These adjustments all took place after grade had been reached by the respective streams, and the differences in level were not sufficient to cause an important deepening of the channels and valleys of the captured streams. In the case of Castor, also, the hard rock over which it was let, has held it up, so far, to nearly its former level, above the point of capture. There is a low terrace in the valley west of Leora. There are two or more terraces in the valley east of Leora, but their significance was not worked out. The Advance lowland, where it was occupied by the Mississippi, when the latter followed the course of the Morehouse lowland, is about eight or ten feet lower than its level in the vicinity of Advance.

7. Second Capture of the Mississippi

Sexton creek (S. Plate V), like Wolf and Canev creeks. originally flowed westward into the Mississippi, entering the latter in what is now the bottom lands southeast of Cape Girardeau. It also had an upper course on soft rock and a lower on hard rock. Its upper course was held, therefore, at a high level by the inability of the stream to cut rapidly into the hard limestones down to a low grade. While waiting in such an exposed position, it was attacked by a stream (Y, Plate V) which had no such difficulties to contend with, and turned into the Ohio valley. A valley was soon excavated on the soft rock and extended well back beyond the point where the hard rock first appeared above its grade. At the point of capture, the level of the small valley was at about the level of the Mississippi. Here, also, the Mississippi was sapping the southeastern bluff, this being the convex side of the river curve. It finally cut into this valley, as it had already done at the point of capture of Caney and Wolf creeks, and found through it a still shorter course into the valley of the Ohio. This change took place so recently that the river has not yet had time to clear its channel of rocks, much less to form a flood plain (Plate II, No. 2).

At the point where the river leaves its old valley and enters the young one, the rocky bluffs descend down to the water on both sides. On the east side the bluff follows the river bank through the gorge. Immediately south of the entrance, the west bluff leaves the river and curves westward and southward, leaving a strip about a quarter of a mile wide between its base and the river. This is not steep, and the rocks do not outcrop abundantly on it. The low strip is not a flood plain of the Mississippi apparently, at least, not all of it. It is higher than the Mississippi flood plain and is not as sandy. It is not continuous southward either. It is local. It is without much doubt a locally widened part of the valley of Sexton creek after it was captured and turned southward. This was the turning point, and the valley was widened toward the west here by sapping on the convex side of the stream. The Mississippi, although it undoubtedly followed originally the lowest

line of this valley, yet was unable to adjust itself to so sharp a turn, so that it gradually worked back eastward to its present position.

An examination of the map (Plate VI) shows that the line of the bluffs along the northern side of Benton ridge, does not fall into the line, when extended, of those north and east of Grays Point. A curved line, in other words, following the north bluffs of Benton ridge northeastward, when carried beyond Grays Point on the same curve, runs out onto the bottom lands at first, striking the bluffs several miles north of that place. This is doubtless due to a tributary of Sexton creek, which originally flowed into that stream from the northeastward along a course lying just west of the existing line of bluffs. The existing bluffs are, therefore, the eastern bluffs of that stream steepened by the Mississippi river. On account of this, the river was able to push further eastward here than elsewhere on this curve. It probably took place before the river was captured.

Another interpretation of the phenomenon would be that there was no small valley there, and that this lack of coincidence in the bluff lines on opposite sides of Grays Point is due to erosion of the bluffs, east of that place, by the river since it was captured. The curve in the bluffs on the west side of the river, just within the mouth of the gorge described above, may have been eroded by the Mississippi at this time where it turned from a southwestwardly to a southerly course. The narrowness of the gorge, even in the soft rocks of its southern end, is the strongest evidence against this interpretation.

Thus has the Mississippi, handicapped by the heavy load of sand thrown into it chiefly by the Missouri, found it necessary to abandon two valleys in succession, after each was eroded down to grade, and opened out to a width of several miles, in favor of the valleys of small creeks, which it had to work over and enlarge in order to make them suitable for its purpose. The amount of work that it has had to do has been increased by these changes, yet it has gained a shorter and more direct line to its destination. It has been engaged in the improvement of its line by straightening the curves. Large streams, as well as small ones, find means of getting themselves out of difficul-

ties inherited from mistakes or unavoidable conditions of their early youth.

8. Capture of St. Francis River

St. Francis river, like Castor, originally flowed into the Mississippi while the latter occupied the Advance lowland. After the first capture of the Mississippi, the St. Francis continued to follow the lowland southward along with Black, Current, and other Ozark rivers. At the present time, however, it leaves this belt and crosses Crowley ridge at the state line into the Morehouse lowland. Its course through the ridge has been adopted recently. The width of the notch through which it finds its way across the ridge, is only about six hundred feet. The ridge just at this point or just at the north side of it is narrow also. It has not been mapped, but a hasty reconnaissance indicates that the ridge narrowed southward to the gap, where it was cut through by the sapping of the streams on opposite sides. There is no evidence of the process having been hastened by small tributary streams. The narrowness of the ridge makes such assistance improbable and unnecessary. The narrow valley through the ridge shows that the capture took place recently. The character of the St. Francis in the Morehouse lowland, south of where it enters it, shows also that the river has occupied its existing course so recently that it has not yet had time to establish a well defined channel. It spreads out over the lowland irregularly.

9. Beheading of the Crowley Ridge Drainage

A number of transverse belts of lowland across Crowley ridge were described above as "Minor Lowlands." They are merely the valleys of creeks which originally had their sources well to the east of the existing eastern side of the ridge. During this time they developed flood plains along their lower and middle courses. By the westward sapping of the Ohio river the heads of these streams were cut off and enough of their trunks to drive the line of bluffs backward so that it would cross them at points where their flood plains were well developed. They

all have the remnant of the original stream occupying the portion that is left. They are narrow at the northern end of the ridge and wider at the southern. The beheaded valley of Lick creek at Idalia is about a quarter of a mile wide. That at Dexter is about half a mile, and one six miles south of the latter place is about a mile in width. The southern part of the ridge has been pushed further west of the original divide, apparently, than the northern part.

10. Origin of Bird Hill and Its Associates

The group of isolated hills including Bird, Lost, Cow, and Ringer hills are isolated portions of Crowley ridge. They are built up of exactly the same kind of rocks as it is, and the rocks have the same relative positions and the same attitude. Cow hill lies just within the crossing point of the projection of the southeastern and northern bluff lines of Crowley ridge. The others lie within these same lines, except the northern part of Lost hill, which projects a little north of it. The location of the latter hill was determined by hand-compass triangulation and may be not exactly right, though it is not far out of its true position. These hills constitute, therefore, a part of Crowley ridge, in which interlacing valleys constitute by far the larger part. Cow hill marks the northeastern corner of the ridge.

No solution that is entirely satisfactory has yet been found for the problem of their origin. The most probable one is that this area was originally occupied by a stream with rather widely branching tributaries. It may have flowed north or northwestward into the Mississippi, from a divide south of the ridge, or may have flowed southward from the northern part or north of the ridge. In the first case the stream and some branches were beheaded by the Ohio, and subsequent streams grew backward, inverting the drainage to a southerly direction. In the second case the Mississippi beheaded them, thus opening valleys through the ridge from the northern to the southern side of the ridge. In either case these valleys were afterward occupied and enlarged by arms of the Mississippi.

II. "Sand Blows"

At various points within the eastern part of the lowland region there are small areas in which the soil is a pure sand with very often small pieces of lignite scattered through it. They occur chiefly on Sikeston ridge and east of it. West of this their occurrence was not noticed during the field work. They vary in size, though they are often not more than twenty feet in diameter. The sand is so pure and so lacking in plant food that, where occurring in the fields, these spots remain bare of vegetation. They are thought by the farmers of the localities to be the results of eruptions from beneath. They occur within an area in which the surface or soil layer is a thin Loess-like or loamy deposit, underlain by a bed of pure loose sand, or else in an area underlain by a very sandy alluvium in general, on top of which has been spread a thin coating of clay since the region was abandoned by rivers having strong currents. Their existence seems to be due to a slight unconformity between the sand and overlying loam. The surface of the sand was slightly uneven when the loam was deposited on it, and the tops of some of the sand hills project through the layer of loam, either because they were never covered or have been uncovered by subsequent erosion.

The evidence, however, seems to be indisputable that during the earthquake shocks of 1811-12, there were points where the water spouted out of the ground to a height of several feet, carrying with it quantities of sand and lignite with black mud. This phenomenon is referred to in all the accounts of eye witnesses, and since such phenomena are known to accompany earthquake shocks in flood plains and deltas elsewhere, there is no reason to doubt their occurrence here. The "blows" may in some cases, therefore, be localities of such earthquake phenomena.

These with other phenomena that are popularly connected with the earthquake, need further investigation on the ground before definite conclusions can be announced.

12. Résumé of Geographical Development

The existing cycle was inaugurated by the uplift at the close of the first glacial epoch. The Mississippi river entered the region by way of where Cape Girardeau now stands and turned westward, following rather closely the western border of the Loess deposits. The Ohio river flowed southwestward and then southward from where it now enters the region, somewhere between the eastern edge of Crowley ridge and the uplands of western Tennessee. The small rivers from the Ozark region were tributary to the Mississippi within the area of the region under consideration. During the first stage of this period the Mississippi eroded the broad valley called in this paper the Advance lowland, and the Ohio eroded the much broader belt of lowland comprised between the eastern edge of Crowley ridge and the uplands of western Tennessee, described in this paper under the heads of the Morehouse and Charleston lowlands and the low terrace-like Sikeston ridge.

The Mississippi river was finally turned through the ridge that separated its valley from that of the Ohio, through the valley of Caney creek, which had been captured by a small tributary growing headward from the Ohio. All that part of the Advance lowland lying west of the present position of the village of Delta, south of which the turn through the ridge took place, was abandoned by the Mississippi. It continued to be occupied, however, by the Whitewater, possibly, but certainly by the Castor, St. Francis, and Black rivers, but only in a misfit way.

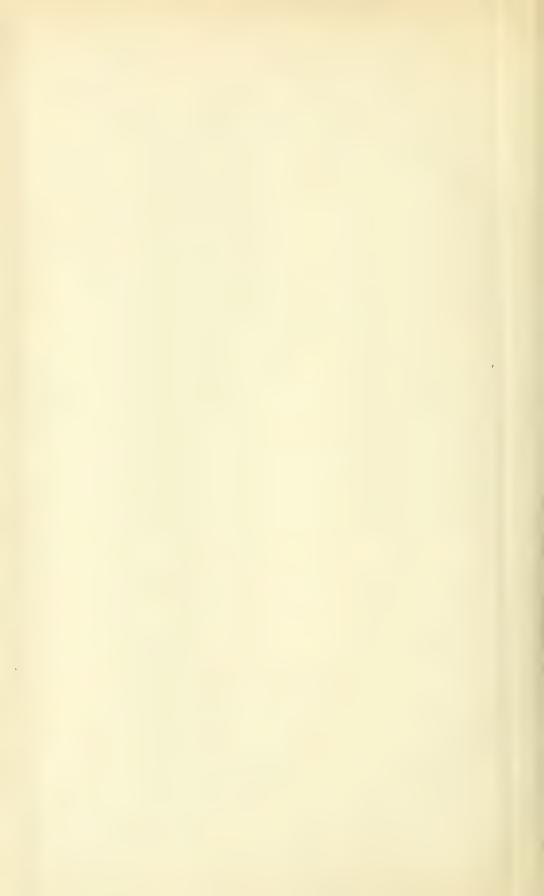
After having turned through the ridge, the Mississippi joined the Ohio a short distance south of the locality of New Madrid, Missouri. During the time that it occupied this route it cut a wide valley through the ridge which had formerly separated it from the Ohio. Its relation to the Ohio was not yet a satisfactory one. Just south of where Cape Girardeau stands now, it approached within about eight miles of the valley of the latter stream, whose flood plain was several feet lower than its own. Furthermore, the same facilities for getting into the Ohio valley by way of the valley of a stream tributary to the Ohio, were soon

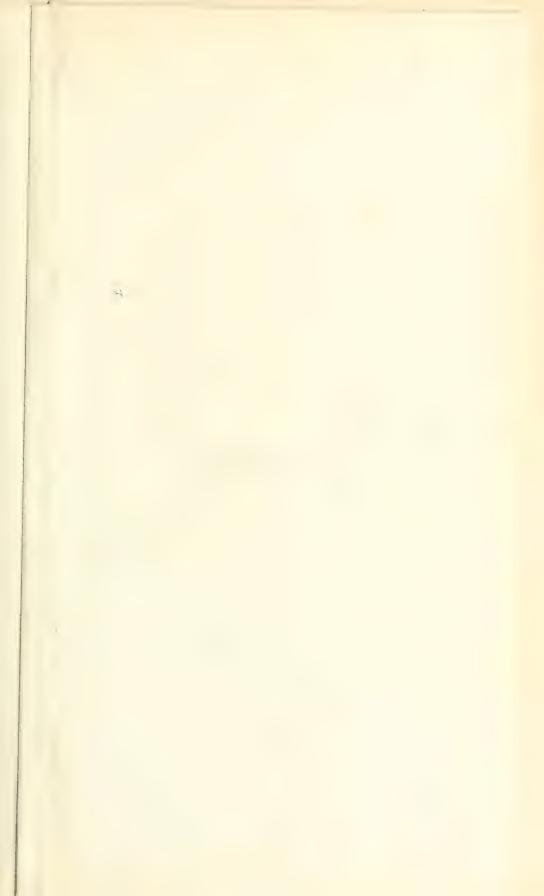


offered and accepted. By this change the river abandoned the eastern end of the Advance lowland belt and the whole of the Morehouse lowland belt, and entered the Ohio valley at Commerce instead of west of where Morley now stands, as it did before the change. This change happened recently—so recently that the river has not yet had time to fully adapt the small valley to its own size.

While the Mississippi occupied the Morehouse lowland, a small stream was working back headward along the track now followed by Castor river across Crowley ridge. It finally worked backward to near where Leora now stands and captured Wolf creek, which had been a tributary first of the Mississippi, later of Lick creek, a second time of the Mississippi, and finally of the Castor. The accession of the drainage from Wolf creek increased the size and ability of this pirate so much, that it was able to work backward along the abandoned lower part of Wolf creek valley and finally offer Castor river a better route to the Mississippi than it had had since the abandonment of the Advance low-land.

The St. Francis, also, which, like the Castor, was left in the broad Advance lowland belt to find its way to sea in the best way it could devise, finally succeeded in getting through Crowley ridge at what is now the state line. It got through, however, at a point where the ridge is extremely narrow.





4 EILEITHYIA



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EILEITHYIA

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ABBREVIATIONS EMPLOYED

- C. I. A.: Corpus Inscriptionum Atticarum.
- C. I. G.: Corpus Inscriptionum Græcarum.
- Él. Cér.: Lenormant et de Witte, Élite des Monuments Céramographiques.
- I. G. I.: Inscriptiones Græcarum Insularum.
- I. G. S.: Corpus Inscriptionum Græcarum Græciæ Septentrionalis.

EILEITHYIA*

CHAPTER I

IDOLS OF CHILDBIRTH

The oldest images of divinities found on Greek soil are idols of a most crude shape, belonging to the prehistoric period, which dates not later than 1500 B. C. It is very remarkable that those idols which represent females are by far more common than those representing males. The female idols are found not only throughout the Greek world, but also in the Orient. Assyria, for instance, we have evidence that they were common as early as the fourth millennium. They play a most important part in the earliest history of religion, and demand therefore our closest attention. We frequently hear the terms 'Babylonian Istar' or 'Phœnician Astarte' applied to this female type of idol without sufficient reason. It is not my intention to deal with the vexing question as to their proper terminology and original home, but we must, and this is of far greater importance, have a clear conception of the nature and character of these primeval female divinities. To attain this end it is necessary, on the one hand, to make a careful study of the manner in which they are represented; and on the other, to trace the development of the type. We shall thus reach the interesting result that the goddess—I do not attempt to give her a name—was worshipped for many centuries without interruption, from prehistoric times to the best period of Greek civilization.

^{*}This work is a translation and revision of an article published by the author in the *Philologus*, Supplementband, VIII., pp. 453-512.

¹ See v. Fritze, in Jahrbuch d. k. d. archäolog, Instituts, XII. 1897, pp. 199 sqq.

The most primitive example of a goddess of this type is a lead idol found in Troy.² It represents a nude standing female divinity, with arms crossed on her breast, with long curls over her ears, and with strongly marked vulva. Noteworthy is her necklace, consisting of a number of rings. Every candid and unprejudiced observer will recognize in this figure characteristic features of a female goddess of generation.

A similar type of female figures, but of terra-cotta instead of lead, has been found on the island of Cyprus. These divinities are called 'Brettidole' by the German archaeologists, because their bodies have the shape of a board. The peculiar characteristics of the Cyprian type of prehistoric idols are the large breasts, the exaggerated indication of the vulva, and the hands laid on the abdomen.⁸ Especially common on the island of Cyprus is another type of oriental divinity, considerably later in date, a type which covers a long period. Here again the goddess is represented as standing and nude, but instead of laying her hands on her abdomen, she presses her breasts. A combination of the two types is occasionally found, in which the right hand presses the left breast, while the left hand covers the vulva.4 These gestures indicate clearly enough that we have not only a goddess of generation, but also a nourishing goddess before us. The later type, of which we have just been speaking, is not, however, limited to Cyprus; it is found in all parts of the Greek world. Quite fre-

² For an illustration see Schuchhardt, Schliemann's Excavations, transl. by Eugénie Sellers, p. 67 fig. 60; Hoernes, Urgeschichte der bild. Kunst in Europa, p. 178 fig. 30. In Hoernes's illustration the hooked cross or swastika on the vulva is not given, for on cleaning the idol it was discovered by von der Steinen that this sign was a modern forgery. On this point see Hoernes, l. c. p. 178 note 1; p. 339 note 3; and p. 344, where he cites v. der Steinen's article, Prähistorische Zeichen und Ornamente, Sonderabdruck aus der Bastian-Festschrift, Berlin, 1896, p. 7 note 3.

^{*} For illustrations see Hoernes, Urgeschichte, p. 180 figs. 32-34.

⁴ Perrot et Chipiez, Histoire de l' Art dans l' Antiquité, III. p 555 figs. 379, 380; ib. p. 450 fig. 321; ib. p. 557 fig. 382. Cp. Hoernes, Urgeschichte, p. 93.

quently it is modelled not in full figure, but in bust form, or, to speak more accurately, the upper part of the body is represented as a mask. As such it is found, for instance, in Boeotia in the fifth century B. C. When we take up the study of the votive offerings to the divinities of childbirth, we shall have occasion to refer once more to this remarkable mode of representation as a mask or It seems quite certain that the worshippers of the Cyprian terra-cotta board-shaped idols, and of the later limestone and terra-cotta idols of more human form, considered their divinity to be endowed, above all else, with maternal qualities. As a goddess of generation and nourishment she would naturally be the deity under whose special protection mothers would be willing to place themselves. As a motherly goddess she would furthermore be a care-taker and cherisher of children, a divine nurse or Kourotrophos. That she was in reality considered as such is proved by the monuments themselves, on which she is sometimes represented with a child on her arm. It is a very old idea that the goddess under whose protection mothers and children stand, should be represented in her images as a mother or as a nurse herself. And so it is only natural that the goddess who produces fruitfulness in marriage should herself be treated as a fruitful divinity.

The prehistoric birth-giving and nourishing deity occurs not only in lead, terra-cotta, and lime-stone, but also in marble. On the islands of the Aegean sea, and even in the Peloponnesus, idols made in the nobler material have been found. This marble type is known at present under the name 'Inselidol,' i. e., 'Islandidol,' and is, as I have stated above, usually identified with the Babylonian Istar or the Phoenician Astarte. That we are here

^o Hoernes, *Urgeschichte*, p. 182 figs. 35, 36. In the Museum at Karlsruhe there is a very old idol with board-shaped body, carrying a child which stands on its shoulders. For other illustrations of Cyprian Kourotrophoi, see Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*, III. p. 202, fig. 144; p. 553 fig. 376; p. 554 fig. 377. These figures are draped, and belong to a much later period than that with which we are concerned.

dealing with a divinity parallel to those already discussed is apparent from the characteristic nudity, the highly developed breasts, the broad hips, and the large vulva. She is at times even represented in a state of pregnancy." Where such is the case, some archaeologists have been tempted to conclude that a human being is meant by the image, and not a goddess. But the necklace and especially the diadem with which these figures are adorned forbid such an interpretation. A divinity that had not suffered in person the pangs of childbirth during some period of her existence could not be popular as a goddess, whose chief care it was to take charge of the actual processes of birth. This conception of the gods is common to all peoples in the early stages of their religious development. The 'Island-idol,' besides being a goddess of generation, was also worshipped as a divine nurse or Kourotrophos, for she too is sometimes represented with a child in her arms.6

How wide-spread the type of the maternal goddess actually was, is seen from the terra-cotta figurines found in Thracian mounds. Here she is not represented as standing, but as seated on a primitive throne. Again she is entirely nude, has big broad hips, a remarkably large vulva, but exceedingly small breasts. I shall not attempt to name these prehistoric idols, for I firmly believe that they were worshipped in different localities under different names, just as in later times there was any number of Kourotrophoi, lesser goddesses of childbirth and deities of healing in general. For my purpose it is quite unnecessary to find names for these divinities. It is of far greater importance to realize that in the prehistoric period the most important deity is not male, but female, and that it is her chief function to prevent bar-

^{*}Hoernes, Urgeschichte, p. 184 figs. 37, 38. For an island idol as Kourotrophos, see Reichel, Ueber Vorhellenische Götterculte, p. 81 fig. 34 = Perrot et Chipiez, Histoire de l' Art, VI. p. 740 fig. 332. The child is standing on the head of the goddess.

^{&#}x27;See Hoernes, Urgeschichte, pl. III.

renness, to futher procreation, and to have a care for the young. And it is only natural that it should be so, for the great secret of birth and of the propagation of the human race concerned primitive peoples at a very early age. Primitive man creates his gods after his own image. Woman gives birth to mankind, she nourishes her offspring; for that very reason, indeed, man places himself under the protection of a maternal deity, whose noblest duty it is to care for the propagation of the tribe, and under whose protection the children flourish.

The same ideas concerning a birth-giving and child-nourishing goddess prevail among the masses in the Mycenaean and archaic periods. In the course of time, however, some changes had taken place in the mode of representation. I am inclined to interpret the well-known female Mycenaean type of idol as a goddess of generation, because it occurs not unfrequently with a child on its arm, and once as pregnant. Here, for the first time, we find the goddess draped. The breasts are scarcely indicated, but the necklace of the old type is still retained. It is noteworthy that the arms are raised, a position which the ancients thought would facilitate childbirth. Now, since the goddess is represented as divine nurse, since again she is with child, and since finally she stands with outstretched hands, a posture recommended as most helpful to women in labor, I do not hesitate to call these Mycenaean idols goddesses of childbirth.

^{*} See Perrot et Chipiez, Histoire de l' Art, VI. p. 742 fig. 335; Schuchhardt, Schliemann's Excavations, transl. by Eugénie Sellers, p. 128 figs. 126, 127; p. 186 figs. 159, 160. For the Mycenæan idol as Kourotrophos, see ΈφημερΙς ἀρχαιολογική, VI. 1888, pl. IX. no. 16. Cp. Mayer, Jahrb. d. arch. Instituts, VII. 1892, p. 197 note 21. See also Perrot et Chipiez, VI. p. 745 fig. 338. Reichel, Vorhell. Götterculte, pp. 68 sqq. gives an entirely different explanation of these Mycenæan terra-cotta idols.

^{*}See Dörpfeld. Troja, 1893, p. 101; Schliemann, Bericht über die Ausgrabungen in Troja, 1890, pl. I. fig. 3—Perrot et Chipiez, Histoire de l'Art, VI. p. 744 fig. 337.

¹⁰ See Wolters, Ἐφημερις ἀρχαιολογική, X., 1892, pp. 229 sqq. for the gesture of outstretched hands.

In the post-Mycenaean period we have examples of a parallel divinity of childbirth in the bell-shaped female terra-cotta figurines found in Boeotian graves. Two copies of this type are in the Berlin Antiquarium. That one of these holds her hands on her abdomen, is important for the interpretation. The swastika or hooked cross which is painted on her dress need not have any particular significance, even though it originally served as a symbol for man or vulva," because in the post-Mycenaean period with which we are now concerned, the sign of the swastika was often used for purely ornamental purposes. A mere glance at the post-Mycenaean vase-paintings will prove this sufficiently. The characteristic peculiarity of the Berlin bell-shaped idols is the long neck, ornamented with a necklace consisting of nine rings, which reminds one of the lead idol found in Troy. A third, but more highly developed copy of this type, is now in the Louvre.12 It is noteworthy that these idols, as well as those of the Mycenaean period, are draped, whereas those of the prehistoric period are entirely nude. Furthermore, it is noteworthy that the idols, both in the prehistoric and in the post-Mycenaean period, were often put into graves. Does this not seem to contradict the interpretation advanced above? Does it not rather seem to indicate that these idols are meant to represent human beings? Why should a maternal goddess of generation be placed in the grave with the dead? Without entering in detail upon this interesting question, I shall merely call attention to the fact that the ancients were staunch believers in the saving power of their divinities even after death. In other words, the tutelary goddess of the living was also the guardian spirit of the dead.

Other examples of the post-Mycenaean draped goddess of

¹¹ For the swastika as a symbol, see Hoernes, Urgeschichte, pp. 337 sqq.

¹² For the Berlin bell-shaped idols, see Hoernes, *Urgeschichte*, p. 397 figs. 124, 125; for the copy in Paris, see Hoernes, *ib*. p. 396 figs. 122, 123. See also Perrot et Chipiez, *Histoire de l' Art*, VII. p. 149 figs. 28, 29; p. 150 figs. 30, 31.

childbirth and fruitfulness have been found in great numbers in the Heraion, near Argos, excavated by the American School of Archaeology. They are not yet published, but Dr. Chase, who has charge of the terra-cottas, has kindly given me permission to mention these interesting and important finds. Sometimes the goddess is represented as standing, but more frequently as enthroned; she wears a diadem, necklace, large ornaments over her breast, and bracelets on her arm. The material is terra-cotta, the workmanship very primitive, due to religious conservatism, for the Argives of this period were capable of doing better work. It goes without saying that no other goddess would be worshipped in so universal a manner, here in this holy precinct of Hera, than the mistress of the temenos herself. And so, for the first time in the history of the development of this type of idol, are we able to assign a name. But we have no right to conclude that because the goddess of childbirth at the Argive Heraion was Hera, she was necessarily worshipped under the same name elsewhere. That the Argive Hera type actually represents a goddess of childbirth is strengthened by the fact that this type often appears as Kourotrophos with a child in her arm or at her breast.

Likewise the so-called 'Papades' belong to this series. They resemble the idols from the Heraion in that they are always draped, and in that their bodies are not modelled with any attempt at reproducing nature, but are left quite as flat as a board. The arms, which have degenerated to mere stumps, are outstretched, and remind one of the Mycenaean idols; there is, however, not the slightest trace of breasts.¹³ That they are nevertheless female figures is seen by the girdle, necklace, and rich head-dress.

We have just considered quite a large series of prehistoric and early Greek idols, and have reached the following conclusions. In the oldest period a peculiar type of idol was worshipped as a goddess of generation and fertility; a divinity whose strongly ac-

¹³ For 'Papades.' see Heuzey, Figurines Antiques, pl. 17, figs. 1-3; Hoernes, Urgeschichte, pl. I. fig. 1; Archäologischer Anzeiger, 1889, p. 156.

centuated vulva, broad hips, and swelling breasts characterized her as such with unmistakable clearness. From the middle of the second millennium B. C., which marks the beginning of the Mycenaean period, down to the archaic period (seventh century B. C.), this same type of divinity was still worshipped, with the only difference that the goddess was almost always draped; necklace and head-dress, however, were common not only to the prehistoric, but also to the Mycenaean and to the post-Mycenaean period. Sometimes the hands were laid on the abdomen, at other times they pressed the breasts or were outstretched. The latter gesture indicates, as we have seen, that the goddess is in the throes of childbirth. In some few cases, indeed, we found that she was actually represented as pregnant. Furthermore, in her capacity of divine nurse, or Kourotrophos, she appears with a child at her breast. or in her arms. Both types, with and without child, show a parallel development without a break, throughout these many centuries. This is important.

It was only one step in the development that the maternal deity, who had herself suffered all the pangs of child-bearing, should become the goddess who cares for the travail-pangs of women, and who assists them in the actual processes of birth. Since these were her functions, she was the protectress of all mothers. Again, it was only natural that the goddess who brought children into the world, would also be concerned with their bringing up, and so she was worshipped as Kourotrophos.

This same development can also be noticed in the mythology of the ancient Greeks. I need give only a few instances. Hera, in her capacity of child-bearing maternal deity, is the guardian spirit of women, especially in wedlock. Just as every man in the Roman world had his genius, so every Roman woman had her Juno. At a very early period of Greek mythology Hera was worshipped as a goddess of delivery, to whom women in travail directed their prayers. For that very reason the Eileithyiai, those goddesses who had no other function than that of assisting women

in parturition, were called daughters of Hera. Eileithyia's praises, as we shall see below, were sung in her old Delian Hymnos as a maternal goddess. The maternal side, however, soon sank into the background, and consequently we have literary evidence for only two localities in which Eileithyia was worshipped as a mother, namely, Delos and Thespiai. At those places she was invoked as the mother of Eros (Pausanias, IX. 27, 2). In Olympia Eileithyia was closely connected with the youth Sosipolis; but whether the relation between the goddess and the youth at Olympia was the same as at Thespiai and Delos, remains doubtful (see below, page 26, note 35). The primary conception of the goddess of childbirth as a mother leads to the opinion that she was also Kourotrophos. The votive offerings dedicated to Eileithyia prove beyond doubt that she was worshipped not only as a goddess of delivery, but also as a tutelary divinity of children. We can trace the process of development of a maternal child-bearing divinity into a goddess of childbirth and Kourotrophos, not only in the case of Hera and Eileithyia, but also in the legends of Helen (Pausanias, II. 22, 6) and of Auge (Paus. VIII. 48, 7), which we shall discuss later. Another good illustration of this point is found in the legend of Damia and Auxesia, who were represented in their cultstatues as kneeling, a position adopted by the ancient Greek women in travail, because it facilitates the delivery. But more of this later.

Thus far we have considered the most primitive monuments and some of the early Greek myths and legends that bear on our subject. Let us now see whether the language of the Greeks will be of any assistance to us. The Greek expressions which have reference to sexual intercourse are taken from the world of plantlife. Metaphorically speaking, the father was the plower. The conventional formula in Athenian marriage contracts reads thus: ἐπὶ παίδων γνησίων ἀρότω. According to Plutarch, three sacred plowings were celebrated, ἄροτοι ἱεροί, τούτων δὲ πάντων ἱερώτατός ἐστιν ὁ γαμήλιος σπόρος καὶ ἄροτος ἐπὶ παίδων τεκνώσει. (Other

interesting examples of this kind have been carefully collected by Professors Preller and Mannhardt.14 We learn from these metaphorical phrases that the deities of vegetation and plant-life stand in very close proximity to the birth, growth, and increase of man. So close is the affinity between divinities of generation and of vegetation, that in some special cases we cannot ascertain which is the primary and which the secondary form. We do not, for instance, know whether Demeter and Kore, Damia and Auxesia were originally goddesses of growth and vegetation, and only secondarily, in a later phase of their development, worshipped as goddesses of generation, or whether just the opposite was the case. The ithyphallic Hermes, a god of fertility in plant-life, comes under the same head. It is noteworthy that the goddess of childbirth par excellence, Eileithyia, was never held to be a goddess of vegetation, nor of the breeding of domestic animals. For that very reason, however, I believe that she is a late appearance in the circle of Greek divinities.

It is extremely difficult, as we have seen, to distinguish the primary from the secondary divinities of generation, and in some cases it is impossible, because we have only subjective ideas concerning the very beginnings of a religious belief, and the original nature of divine personalities. Damia and Auxesia, for example, are considered goddesses of vegetation in historical times, but they show traces of diverse changes (see below, pages 34 sq.).

And yet another class of divine beings is firmly established as secondary gods of fertility in women; I refer to the deities and demons closely connected with the winds. For in the imagination of all agricultural tribes the winds were held to be spirits that fructify the earth.¹⁵ In addition to promoting growth and vege-

¹⁴ Plutarch, Praec. conjug. 42. Cp. Preller, Demeter und Persephone, p. 354 and note 61; and especially Mannhardt, Mythologische Forschungen, p. 352.

¹⁵ See Roscher, Hermes der Windgott, pp. 71 sqq.; id., in Roscher's Lexikon, I. 2, pp. 2376 sqq., pp. 2360 sqq.; Mannhardt, Myth. Forschungen, p. 296.

tation the winds were thought to render the herds productive. It was only a small step farther in the evolution of the wind-gods to attribute to them the power of promoting fertility in human beings. In this subordinate sense Hermes, the wind-god, is a secondary god of childbirth. Similarly the Boreadai and Tritopatores may also become secondary gods of birth. The Tritopatores, Amalkides, Protokles, and Protokreon were the door-keepers and guards of the winds, according to the Orphic Physika. Demon, the author of an Atthis, tells us that they were winds themselves. Phanodemos reports that only the Athenians had the custom of praying before the wedding ceremony to the Tritopatores for offspring, ὑπὲρ γενέσεως παίδων.16 As secondary birthdeities we must also reckon, among others, the Erinyes, Eumenides, and Nymphs, because they could guard against barrenness. In this group belong furthermore all such divinities and demons as are only occasionally concerned with those processes which further the increase of mankind.

Let us once more briefly sum up the results reached by these general introductory remarks. The oldest extant maternal idols prove that in the second millennium B. C.—perhaps even earlier—a cult or system of religious worship of a birth-goddess flourished in Greece. This is also verified by some of the oldest Greek legends. Metaphorical phraseology taken from agriculture was used in connection with topics which bear on procreation. This proves that the protecting deities of husbandry and of cattle were so closely interwoven with the guardian spirits of childbirth that the two classes of divinities cannot, as a rule, be distinguished; their symbols and features not being distinct. In other words, those divinities whose function it is to fructify the earth can also guard against sterility in the human race. Such gods may be designated as secondary deities of childbirth. Primary deities of childbirth, moreover, are those maternal child-

¹⁹ Suidas, s. 2. τριτοπάτορες. Cp. also Kern, in Pauly-Wissowa's Real-Encyclopaedie d. classischen Alterthumswissenschaft, II. pp. 1215 sqq.

bearing goddesses who are especially concerned with the affairs of generation, with the actual processes of birth, and with the rearing of children; in other words, they are divine midwives and nurses. They too may become goddesses of fertility of the soil and of the animal world. These reflections would necessarily form the starting point for any detailed study of the nature of the gods of birth. Such a study, which is, however, beyond the scope of this paper, would lead to the conclusion that primary deities of childbirth are extremely rare, whereas those who were only occasionally worshipped as divinities of generation because of their power to fertilize the fields and the flocks, are innumerable. The purpose of this paper is to deal especially with the nature, the functions, and the cult of Eileithyia, but it will be necessary to make occasional mention of her companions for the sake of comparison.

It will, no doubt, be most appropriate to make a topographical classification of the cult localities of Eileithyia, and in connection with each sanctuary to mention the literary evidence, and also the inscriptions and other finds that bear upon the subject. Only then shall we be able to obtain a clear picture of the nature and the importance of our goddess Eileithyia.

CHAPTER II

SANCTUARIES OF EILEITHYIA

ATHENS

Paus. I. 18, 5. πλησίον δὲ ψκοδόμητο ναὸς Εἰλειθυίας, ην ἐλθοῦσαν ἐξ Ύπερβορέων ἐς Δηλον γενέσθαι βοηθὸν ταῖς Λητοῦς ώδῖσι, τοὺς δὲ ἄλλους παρ' αὐτῶν φασὶ τῆς Εἰλειθυίας μαθεῖν τὸ ὄνομα καὶ θύουσί τε Εἰλειθυία Δήλιοι καὶ ὕμνον ἄδουσιν 'Ωληνος. Κρητες δὲ χώρας τῆς Κνωσίας ἐν 'Αμνισῷ γενέσθαι νομίζουσιν Εἰλείθυιαν καὶ παῖδα Ἡρας εἶναι. μόνοις δὲ 'Αθηναίοις τῆς Εἰλειθυίας κεκάλυπται τὰ ξόανα ἐς ἄκρους τοὺς πόδας, τὰ μὲν δὴ δύο εἶναι Κρητικὰ καὶ Φαίδρας ἀναθήματα ἔλεγον αἱ γυναῖκες, τὸ δὲ ἀρχαιότατον Ἐρυσίχθονα ἐκ Δήλου κομίσαι.—

Isaios, V. 39. τὴν δὲ μητέρα [τὴν] αὐτοῦ καθημένην ἐν τῷ τῆς Εἰλειθυίας ἱερῷ πάντες ἑώρων, καὶ τούτῳ ἐγκαλοῦσαν ἃ ἐγὼ αἰσχύνομαι λέγειν, οῦτος δὲ ποιῶν οὐκ ἦσχύνετο.—

C. I. A. II. 3, 1586. Base of an ex voto found near the Metropolitan church.

Έπὶ [ἱερε]ίας Πα — ης Χη . . ων Τίμωνος Σου[ν]ιεὺς τὴν θυγατέρα ἀνέθηκεν Χρυσίππην Εἰλυθεία. —

- C. I. A. III. 1, 925. [Τὴν δεῖνα] ἡ μή[τηρ, ἡ δεῖνα τοῦ δεῖνος] έως θυγάτηρ, ἀντιόχο(υ γυ)νὴ | [Φ]αληρέως, Εἰλυθεία.—
- C. I. A. III. 1, 926. Ἰούλιος Ὁπτᾶ[τος] | τὴν ἐαυτοῦ θυγα[τέρα] | [Ἰου]λίαν 'Ρουφῖναν 'Ἰλιθυία | χαριστήριον | [ἐπὶ] ἱερίας Ἰσιδώρας τ[$\hat{\eta}$ ς . . .].—
 - C. I. A. III. 836a. Found in the Asklepieion.

 $\Pi \hat{\omega} \lambda [\lambda \alpha \ (?) \ \dots \dots]$

 τ ηρ Πόπλιο $[\nu]$. ϵ

ύὸν Βάσσον τὸν [έαυτῆς ι]

δοῦν Εἰλειθυί [α ἀνέθηκεν].

AGRAI

Bekker, Anecdota, p. 326, 30 Αγραι Κλείδημος ἐν πρώτῳ ἀτθίδος· τὰ μὲν οὖν ἄνω τὰ τοῦ Ἰλισοῦ πρὸς Ἄγραν Εἰληθυῖα.¹⁷

- C. I. A. II. 3, 1590. On the shaft of a votive column: Ἰλειθύαι | Φιλουμένη | ᾿Αμφιμάχου | γυνὴ ἀνέθηκε | ἐπ' ᾿Αρχεβίας | ἱερείας. On the abacus: Εὐκολίνη. It was found at the Ilissos. Cp. Furtwängler, in Mittheil. d. arch. Inst. in Athen, III. 1878, p 197. At the same place were found some statues of girls, votive offerings to Eileithyia Eukoline (see below, page 50).
- C. I. A. III. 1, 319. Inscription on a seat in the theater: $\epsilon \rho \sigma \eta \phi \delta \rho \rho \sigma \beta$ Εἰλιθνία[s] $\epsilon \nu$ Αγραι[s].

IN THE MESOGAIA

Keil, in Vischer's Erinnerungen und Eindrücke aus Griechenland, p. 68, and id., in the Philologus, XXIII. p. 619 sq. $\delta\rho$ os $\tau \mid \epsilon\mu$ - $\epsilon\nu$ [o] | vs "H ρ [as] | E[i] $\lambda\epsilon$ [i]|[$\theta\nu$ (as]].

MARATHON

Lolling, in Mittheil. d. arch. Inst. in Athen, X. 1885. p. 279, reports (I translate): "Built into the large well in the yard of a certain Mr. Rabanis, who lives near the Sorós, are two fragments of an altar made of Pentelic marble, the upper border of which was decorated with rosettes. On one of these fragments is inscribed 'Αρτέμιδος, on the other Εἰλειθνιῶν." . . . The assimilation of Eileithyia to Artemis is especially common in Boeotia.

As we have just seen, we have four Eileithyia-sanctuaries in Attica. The temple of Eileithyia at Athens must have been situated, according to the description given by Pausanias, northeast of the Akropolis, in the lower part of the city, not far from the

¹⁷ This passage is very corrupt. The manuscript reads πρὸς ἀγορὰν; but there can be no doubt that Wachsmuth's correction πρὸς "Αγραν stands the test. Cp. Wachsmuth in Pauly-Wissowa's Real-Encycl. I. pp. 887 sq.

sanctuary of Serapis, of which Pausanias speaks just prior to his discussion of Eileithyia. Immediately afterwards he makes mention of the colossal temple of Olympian Zeus. As a further confirmation for the site of the temple of Eileithyia the above-mentioned base of the statue of a certain woman, Chrysippe, which had been dedicated by her father to Eileithyia, is of importance, for it was found near the Metropolitan church.

In this temple stood three wooden images, old cult-statues of Eileithyia. As a rule, each temple had but one image; why, then, were three sacred images worshipped here? The Athenians no doubt believed in a multiplicity of Eileithyiai, and so made sacrifices to several images. These archaic cult-statues were draped to the tips of the feet with, as we may well suppose, most costly veils and garments, gifts of thankful mothers after safe delivery. Pausanias asserts that this custom of draping the images of Eileithyia prevailed only among the Athenians, but when he made that statement he had not yet visited Aigion, where he saw, as he tells us, a wooden image of Eileithyia draped from head to foot in a robe of fine texture.

From the conflicting legends concerning the birthplace of Eileithyia we learn that the Greeks were not agreed upon her original home. According to the Delian story Eileithyia came from the land of the Hyperboreans to Delos to help Leto at the birth of Apollo and Artemis. The land of the Hyperboreans is situated where the sun rises, and was identified by the Greeks with Lycia, the land of light. Since Eileithyia came from the land of light she must, of course, have been held by the Delians to be a goddess of light. The Delians even went so far as to assert that from their island as a center the Eileithyia-worship spread over the whole world.

Furthermore, Olen, the mythical author of the Delian Hymn to Eileithyia, was thought to be a Lycian, that is to say, a Hyper-

¹⁸ On the Hyperboreans, see Crusius, in Roscher's Lexikon, I. 2, p. 2818; see also Usener, Götternamen, pp. 202 sq.

borean. The little we know concerning the contents of this old Hymn, we owe to Pausanias. Therefrom we learn that Eileithyia was older than Kronos, that she bore the epithet εῦλινοs, 'the well-spinning one,' from which we may safely infer that she was thought to be a goddess of destiny (Pausanias, VIII. 21, 3), and furthermore, that she passed for the mother of Eros (Paus. IX. 27, 2). This much we learn from the Delian legend about the early history and the character of Eileithyia.

On the other hand, however, an entirely different legend was told by the Cretans regarding the genealogy and original home of Eileithyia. According to their legend Eileithyia, the goddess of childbirth, was born of Hera at Amnisos in the land of Knossos. Also in the Homeric Hymn to Delian Apollo Eileithyia was believed to be the daughter of Hera. This fact indicates that the Cretan myth had slightly influenced the Delian version. No doubt the Cretan was the older version of the two. The Homeric Epos takes only the Cretan legend into consideration. For instance, in the Iliad, XI. 270 the Eileithyiai—note that they are mentioned in the plural—are the daughters of Hera, and in the Odyssey, XIX. 188 mention is made of the grotto of Eileithyia at Amnisos.

In Athens, however, both versions were accepted, and so the women worshipped in one and the same temple the Delian Eileithyia, whose original home was in the land of the Hyperboreans, and the Cretan Eileithyiai. The former was worshipped in one statue, the latter in two. The Athenian women judged the Delian image to be older than the two from Crete, but it does not therefore necessarily follow that the Delian legend is older than the Cretan.

The second Attic sanctuary of Eileithyia in the suburb of Agrai was not mentioned by Pausanias. Its site can, however, be determined by the above-mentioned votive column, which was found on the left side of the Ilissos, above the spring Kallirrhoë. The inscription on this column informs us that a certain woman, Philoumene, wife of Amphimachos, dedicated an

ex voto to Eileithyia, which was doubtless set up in her sanctuary in Agrai. On the abacus of this column is inscribed the word 'Eukoline,' as an epithet of Eileithvia, as Professor Furtwängler rightly infers. Eukoline is likewise known as an epithet of Hekate (Kallimachos-Fragm. 82d). Professor Crusius called my attention to the fact that Eukoline is an euphemistic appeasing name for the goddess who was supposed to send the pangs of childbirth.16 Hekate in her capacity of moon-goddess, is, like all other lunar divinities, a goddess of childbirth, and as such also Kourotrophos.²⁰ Genetyllis, to cite only one of the many examples, has qualities quite parallel to those of Hekate." But have we any evidence that Eileithyia was also considered a moongoddess, beyond that of bearing an epithet common to Hekate? This question can be answered in the affirmative on the strength of a passage of Sokrates, the Argive Periegetes, from which passage we may infer that Eilionia Eileithyia was worshipped as a moongoddess, because dogs were sacrificed to her.22

In the service of Eileithyia at Agrai were two Errhephoroi or Hersephoroi, as priestesses, as we learn from the above-mentioned inscription on one of the seats reserved for priests in the theater of Dionysos. A similar inscription (C. I. A. III. 318) reports that also Ge Themis was served by two Errhephoroi. Furthermore, two Errhephoroi performed a mysterious rite in connection with the cult of Athena Polias on the Akropolis."

³⁸ See Crusius, in Roscher's Lexikon, I. 1, p. 1400.

See Usener, in Rheinisches Museum, N. F. XXIII. pp. 332 sqq.; Steuding, in Roscher's Lexikon, I. 2, p. 1892; Roscher, ib. II. 2, pp. 3187 sq.

²¹ See Usener, l. c. p. 359; Hesychius, s. v. Γενετυλλίς.

Tusener, l. c. p. 336; Plutarch, Quaest. Rom. 52, 277 A quoted below p. 21. Cp. also Conze, Reise auf Lesbos, p. 41, pl. 16, 2: On the base is the following inscription, Θεὰ μεγάλη 'Αρτέμιδι θερμία τὴν κύνα Κλαύδιος Λουκιανὸς 'Αλαβανδεὸς ἀνέθηκεν. The bitch was probably offered to Artemis as a goddess of generation. For the opposite side of the question see Farnell, Cults of the Greek States, II. p. 609.

²² See Pausanias, I. 27, 3. Cp. Preller-Robert, Griech. Mythologie⁴, I. pp. 210 sq.; and Mommsen, Feste der Stadt Athen, pp. 107 sqq., p. 246 note I, and pp. 509 sq.

In Athens an inscription was found, in which mention is made of an Errhephoros of Demeter and Kore (C. I. A. III. 919). Also in connection with the Epidauria of the great Eleusinian Mysteries (C. I. A. II. 1 add. 453 b) we hear of an Arrhephoros. The Arrhephoroi are, therefore, priestesses of divinities of vegetation and of generation. What their particular duty was, we are unable to say. The fact that Errhephoroi were also in the service of Eileithyia Eukoline in Agrai is another verification of the statement that the gods who aid the growth of the commonwealth are closely related to the gods of fruitfulness in plant life. It does not prove, however, that Eileithyia was a goddess of vegetation.

THESPIAI

Paus. IX. 27, 2. "Ερωτα δὲ ἄνθρωποι μὲν οἱ πολλοὶ νεώτατον θεῶν εἶναι καὶ 'Αφροδίτης παῖδα ηγηνται. Αύκιος δὲ 'Ωλήν, ὅς καὶ τοὺς ὑμνους τοὺς ἀρχαιοτάτους ἐποίησεν Ελλησιν, οὐτος ὁ 'Ωλὴν ἐν Εἰλειθυίας ὑμνω μητέρα "Ερωτος τὴν Εἰλείθυιάν φησιν εἶναι. — Pausanias does not make a direct statement that Eileithyia has a sanctuary at Thespiai. But we can infer from his statement that the god Eros, worshipped in a very ancient image or fetich, was the son of Eileithyia (Paus. IX. 27, 1), and not the son of Aphrodite. Now, since Eros was worshipped as the son of Eileithyia in Thespiai, it is more than probable that his mother also had a sanctuary at that place. Eileithyia as mother is otherwise known only through the Kallimachos Fragm. anon. 340 (Schneider): . . . μητρὸς Ἐλειθνίης. —

In the Thespian votive inscriptions Eileithyia is not mentioned, although Artemis Eileithyia is spoken of twice. I. G. S.

1. 1871. [Φλαονία Δορ] | κυλὶς ᾿Αρτέμ[ιδι] | Εἰλειθνίη | τὸν ἴδιον υ[ίὸν] — T((iτον) Φλάονιο[ν] | Λύσανδ[ρον].

²⁴ As to Artemis Eileithyia see Schreiber, in Roscher's Lexikon, I. pp. 572 sq.; and Wernicke, in Pauly-Wissowa's Real-Encyclopaedie d. class. Alterthumswissenschaft, II. pp. 1347, 1356, 1383.

ib. 1872 . . . καὶ [. | τὴν θ]υγατέρα Φιλίππη[ν | 'Α]ρτέμιδι Εἰλειθυία.

ANTHEDON

Ι. G. S. Ι. 4174. Μάτρω[v] Διωνιούσιο[s] | Είραίδ[a] 'Αρτέμιδι [Είλ]ειθιουίη. —

ib. 4175 $\nu[\epsilon]$ ις Λο[v]σιμάχω τὰς θου $[\gamma]$ ατέρας Καραίδα κὴ $[M\epsilon$ λανθίδα ἀΑρτέμιδι Εἰλειθουίη —

ib. 4176. $[......τ\hat{\eta}]$ 'A]ρτά[μιδι] $τ\hat{\eta}$ [Εἰλ]ε[ιθουίη].

CHAIRONEIA

I. G. S. I. 3385 . . . $[τ\hat{\eta} 'Aρτ]$ άμιδι $τ\hat{\eta} 'Ελιθιονίη,$ —

ib. 3386 . . . ἱαρὰν τῆ ᾿Αρτάμ[ι]δι τῆ Εἰλιθίη, etc.

ib. 3391 . . . δè | κ[ὴ] Σωσίχαν ἱαρὰν τ[η̂] ᾿Αρτάμι | δι τη̂ Εἰλειθούη. etc.—

ib. 3410 (ex τ'oto). 'Αρτάμιδι Είλειθίη-

ib. 3411 (ex τ'oto). 'Αρτάμιδι Είλειθίη-

ib. 3412 . . . , Πολιαρχὶς Κράτωνος ἀντίθησιν | τὴν ἰδίαν θεράπαιναν Καλλὼ ἱερὰν τῷ ᾿Αρτέμιδι Εἰλειθνίη, ετε.

ib. 3413 ... 'Ιλ[ι] | θουίη.

LEBADEIA

I. G. S. I. 3101. 'Αγαθŷ τύχη. | Αὐρ(ήλιος) Παρμένων καὶ ἡ γυνὴ αὐτοῦ Αὐρ(ηλία) Εἰσιδότη | 'Αρτέμισιν πράαις χαριστήριον. Dittenberger reads Πρα[ε]ίαις. The 'Αρτέμιδες πρậαι — Εἰλείθνιαι.

ORCHOMENOS

I. G. S. I. 3214. 'Αντικράτεις 'Αρχειῆος, Μίτα | 'Αρτάμιδι Εἰλειθυίη.

TANAGRA

Ι. G. S. I. 555. 'Αθανίκκει, 'Αϊμνω | 'Αρτάμιδι Είλειθυίη.

THISBE

I.~G.~S.~I. 2228 (Priestess). 'Αρτάμιδι Εί|λειθείη.

MEGARA

Paus. I. 44, 2. ἔστι δὲ ἐν τῷ γυμνασίῳ τῷ ἀρχαίῳ πλησίον πυλῶν καλουμένων Νυμφάδων λίθος παρεχόμενος πυραμίδος σχῆμα οὐ μεγάλης τοῦτον ἀπόλλωνα ὀνομάζουσι Καρινόν, καὶ Εἰλειθυιῶν ἐστιν ἐνταῦθα ἱερόν.

Kαρινόν is altered by Sylburg so as to read Κάρνειον, because in Sparta Apollo Karneios was worshipped along with Eileithyia (Paus. III. 14, 6). Others conjecture that Karinos is a dialectical form of Karneios.²⁵ But Sylburg's emendation is not necessary, for Pausanias does not say in this passage that the fetich of Apollo Karinos stood in the sanctuary of the Eileithyiai.

Pausanias mentions here in Megara a sanctuary of "the Eileithyiai." We have already noticed that Eileithyia was worshipped in plurality at Athens, and that in Lebadeia Artemides $\pi \rho \hat{q} a \iota = \text{Eileithyiai are mentioned}$. Homer speaks of Eileithyia in the singular and the plural without discrimination.20 Similarly the vase-painters, when they illustrate the birth of Athena from the head of Zeus, represent sometimes one Eileithyia, sometimes several. In Pausanias we notice the same arbitrariness. This observation is of no small importance to further our knowledge of the nature of the goddess of childbirth. The same fluctuation is seen in the case of the Keres, Erinyes, and Moirai, the explanation of which Professor Crusius has given in a most excellent article.27 Every person has not only a Moira and a Ker as a protecting spirit, or guardian angel, as we should say, but there is also an Eileithyia for every woman, and so the word is frequently used in the plural. Originally the Eileithyiai were the pangs or throes themselves, and consequently without any speci-

²⁸ See Wernicke, in Pauly-Wissowa's Real-Encycl. II. p. 54 and Frazer's Pausanias, Critical note, Vol. I. p. 567.

²⁰ The form Eileithyia is used in the Iliad, XVI. 187; XIX. 103; Odyssey, XIX. 188; and the form Eileithyiai in the Iliad, XI. 270; XIX. 119.

²⁷ See Crusius, in Roscher's Lexikon, II. 1, pp. 1136 sqq., and especially p. 1164.

fied number.²⁸ At every birth the Eileithyiai must be present, if they absented themselves the parturition could not take place. When Hera holds back the Eileithyiai, *i. e.*, the throes, as she did in the case of Leto and of Alkmene, the delivery is thereby made impossible.

CORINTH

Paus. II. 5, 4. ἐκ δὲ τοῦ ᾿Ακροκορίνθου τραπεῖσι τὴν ὀρεινὴν πύλη τέ ἐστιν ἡ Τενεατικὴ καὶ Εἰληθυίας ἱερόν. —

On a bronze statuette: ' $A\rho\iota\sigma\tau\rho\mu\dot{\alpha}\chi a$ $\dot{a}\nu|\dot{\epsilon}\theta\epsilon\kappa\epsilon$ $\tau\hat{a}$ ' $E\lambda\epsilon\nu|\dot{\theta}\iota\hat{a}$. (See below, pages 38 sqq.) This statuette of Eileithyia is most probably an accurate copy of the cult-image in the temple of that goddess at Corinth. As an attribute she holds a flower.

ARGOS

Paus. II. 18, 3. ἐντεῦθεν δὲ ἐπὶ πύλην ἦξεις καλουμένην ἀπὸ τοῦ πλησίον ἱεροῦ: τὸ δὲ ἱερόν ἐστιν Εἰλειθυίας.—

Paus. II. 22, 6 sy. πλησίον δὲ τῶν ᾿Ανάκτων Εἰληθυίας ἐστὶν ἱερὸν ἀνάθημα Ἑλένης, ὅτε σὺν Πειρίθῳ Θησέως ἀπελθόντος ἐς Θεσπρωτοὺς ᾿Αφιδνά τε ὑπὸ Διοσκούρων ἑάλω καὶ ἤγετο ἐς Λακεδαίμονα Ἑλένη ἔχειν μὲν γὰρ αὐτὴν λέγουσιν ἐν γαστρί, τεκοῦσαν δὲ ἐν Ἦργει καὶ τῆς Εἰληθυίας ἱδρυσαμένην τὸ ἱερόν, τὴν μὲν παῖδα ἦν ἔτεκε Κλυταιμνήστρα δοῦναι. συνοικεῖν γὰρ ἤδη Κλυταιμνήστραν ᾿Αγαμέμνονι, αὐτὴν δὲ ὕστερον τούτων Μενελάῳ γήμασθαι. καὶ ἐπὶ τῷδε Εὐφορίων Χαλκιδεὺς καὶ Πλευρώνιος ᾿Αλέξανδρος ἔπη ποιήσαντες, πρότερον δὲ ἔτι Στησίχορος ὁ Ἱμεραῖος, κατὰ ταὐτά φασιν ᾿Αργείοις Θησέως εἶναι θυγατέρα Ἰφιγένειαν. Τοῦ δὲ ἱεροῦ τῆς Εἰληθυίας πέραν ἐστὶν Ἑκάτης ναός. —

Sokrates, fr. 6 = Plut. Quaest. Rom. 52 p. 277 A: 'Αργείους δὲ Σωκράτης φησὶ τῆ Εἰλιονεία κύνα θύειν διὰ τὴν ῥαστώνην τῆς
λοχείας.

Hesychius, s. τ. Είλείθυια "Ηρα εν "Αργει.

On Argive coins: Imhoof-Blumer and Gardner, Numismatic Commentary on Pausanias, p. 39 with pl. K 40; Farnell, Cults of the Greek States, II. p. 609 with Coin pl. B. 51,

²⁸ See Usener, Götternamen, p. 299.

There were in Argos, according to the passages of Pausanias just quoted, two sanctuaries of Eileithyia, the one at the gate named after that goddess, the other near the temple of the Dioscuri. The second sanctuary belonged originally to Helena, also a goddess of childbirth. She and Iphigeneia, two pre-eminent moon-goddesses of great age, were entreated here for easy delivery. In my introductory remarks in the first chapter, attention was called to the fact that the divinities of childbirth were first considered maternal goddesses, who had themselves suffered all the pains of childbearing. Thus, for instance, Eileithyia in Thespiai was worshipped as the mother of Eros, and Helena in Argos as the mother of Iphigeneia. Like Hekate, Helena was also Kourotrophos. Herodotos tells us an interesting story of a nurse who daily carried an ugly child to the sanctuary of Helena at Therapne near Sparta, and how that child grew up to be the most beautiful woman in all Sparta, because Helena had stroked her head.29 Pausanias, without much ado, calls Helena's old sanctuary that of Eileithyia. It is interesting to follow the process how one divinity gradually takes the place of another; in Athens, Asklepios finally pushed Amynos to the wall, and here in Argos, Eileithyia supplanted Helena. This process is possible only when the divinities concerned are of similar nature; in the case of Amynos and Asklepios, because both were gods of healing: in the case of Helena and Eileithyia, because both were lunar goddesses of childbirth. We have already noted how closely Eileithyia Eukoline was related to Hekate and other moon-goddesses. The dog is a fitting sacrifice to such divinities, and was consequently offered to Eileithyia in Argos for an easy delivery.

Hera in Argos was likewise considered an Eileithyia, that

²⁹ See Herodotos, VI. 61 sq.; Pausanias, III. 7, 7. Cp. Rohde, Psyche², p. 196. Especially noteworthy in this connection is the healing hand of Helena. That Helena had the power to make hideous children beautiful was believed in historic times, for the woman about whom Herodotos tells this story was the third wife of Ariston and mother of Damaratos, King of Lacedaemon.

is, a goddess of childbirth. as we are told (Hesych. s. v. Εἰλείθνια). The highly archaic terra-cotta ex votos found in the Argive Heraion have proved this without doubt. (See above, page 7.)

On the above-mentioned Argive coins are represented two Eileithyiai with quivers on their backs. In their hands they hold torches, the one raised, the other lowered; between both goddesses there stands an altar. These quiver-bearing Eileithyiai remind one of the Boeotian Artemides. Arrows are suitable attributes for Eileithyia, because the labor-pains burn like the wounds caused by such weapons.

HERMIONE

Paus. II. 35, 11. Πρὸς δὲ τῆ πύλη καθ' ἢν ὁδὸς εὐθεῖά ἐστιν ἄγουσα ἐπὶ Μάσητα, Εἰλειθυίας ἐστὶν ἐντὸς τοῦ τείχους ἱερόν. ἄλλως μὲν δὴ κατὰ ἡμέραν ἐκάστην καὶ θυσίαις καὶ θυμιάμασι μεγάλως τὴν θεὸν ἱλάσκονται, καὶ ἀναθήματα δίδοται πλεῖστα τῆ Εἰλειθυία τὸ δὲ ἄγαλμα οὐδενί, πλὴν εἰ μὴ ἄρα ταῖς ἱερείαις, ἔστιν ἰδεῖν.—

C. I. G. 1554 = Le Bas-Foucart, 159^d: Αὐρ. ᾿Αμαραντὸς καὶ Ιοὐλ. Ἰωτάπη τὴν ἐαυτῶν θυγατέρα Ἰωτάπην θεῷ Εἰλειθυίᾳ ἀνέστησαν. In the Corpus this inscription is by mistake reported to have been found in Achaia.

It is noteworthy that in Hermione, Argos, Corinth, and Megara the sanctuaries of Eileithyia were situated near one of the city gates. In Paros the grotto of Eileithyia, newly discovered by Dr. Rubensohn, lay far beyond the limits of the town. This may be due to the fact that birth as well as death was considered to be unclean. To this we shall refer later.

It is not quite clear why only the priestesses had access to the cult-image of Eileithyia in Hermione; why, in other words, this shrine should be of such special sanctity. Here she was conceived by the people as an austere deity who could only be propitiated with gifts; wherefore they made sacrifices and burned

³⁰ On the whole subject of Hera as divine mid-wife, see Roscher, in Roscher's Lex. I. 2, pp. 2089 sqq.

incense to her on a great scale every day. After successful parturition all sorts of votive offerings ($dva\theta \eta \mu a\tau a$) were presented to the deity. These votive offerings were doubtless such as we shall discuss in the third chapter of this paper. From Pausanias's description we learn with what earnestness and sincerity the cult of Eileithyia was practised. Indeed, we are told by Platoⁿ that according to his way of thinking a board of superintending matrons should assemble for the third part of an hour every day in the temple of Eileithyia to watch the conduct of newly-married couples.

SPARTA

Paus. III. 14, 6. προσελθόντι δὲ ἀπὸ τοῦ Δρόμου Διοσκούρων ἱερὸν καὶ Χαρίτων, τὸ δὲ Εἰλειθυίας ἐστὶν ᾿Απόλλωνός τε Καρνείου καὶ ᾿Αρτέμιδος Ἡγεμόνης.—

Paus. III. 17, 1. Οὐ πόρρω δὲ τῆς 'Ορθίας ἐστὶν Εἰλειθυίας ἱερόν' οἰκοδομῆσαι δέ φασιν αὐτὸ καὶ Εἰλείθυιαν νομίσαι θεὸν γενομένου σφίσιν ἐκ Δελφῶν μαντεύματος.—

Ross, Arch. Aufs. II. 667 = Le Bas-Foucart 162 ϵ : Μαχανίδας ἀνέθηκε τᾶι Ἐλευσίαι.

The Spartans worshipped together in one and the same sanctuary. Eileithyia, Apollo Karneios and Artemis Hegemone. $\sigma\dot{v}v\alpha\omega$ $\theta\epsilon\omega\dot{\epsilon}$, it must be remembered, need not necessarily possess the qualities of the god in whose temple they have been received as guests; but in the case in hand it seems that Apollo and Artemis were nevertheless worshipped along with Eileithyia because they were held to be divinities of childbirth. Apollo Karneios is the guardian deity of rams and of herds in general. Karneios is a parallel appearance to Maleatas, the guardian deity of sheep. As agrarian divinities it was only a small matter that they should be transformed into divinities of generation of a secondary order

⁸¹ Plato, De legg. VI. 784.

⁸² See Wide, in Roscher's Lex. II. 1, pp. 962 sq.; also Höfer, ib. p. 966.

and consequently brought into close connection with Eileithyia.**
Artemis is sufficiently well known as a goddess of childbirth.
Here she is indentified in her office of Kourotrophos with Hegemone, the 'Leader' of children.**

HIPPOLA

Weil in Mittheil. d. arch. Inst. in Athen, I. p. 162, reports the discovery of a marble relief in the neighborhood of the ancient Hippola, in Lakonia, on which a woman is represented to the right, standing before a burning altar. Behind her are three children. Above is inscribed: $\Delta a \mu a . . \lambda \iota s$ Έλευθίαι $\dot{a}v(\dot{\epsilon})\theta \eta \kappa \epsilon$.

MESSENE

Paus. IV. 31, 9. Πεποίηται δὲ καὶ Εἰλειθυίας Μεσσηνίοις ναὸς καὶ ἄγαλμα λίθου. πλησίον δὲ Κουρήτων μέγαρον.

OLYMPIA

Paus. VI. 20, 2—5. Ἐν δὲ τοῖς πέρασι τοῦ Κρονίου κατὰ τὸ πρὸς τὴν ἄρκτον ἔστιν ἐν μέσῳ τῶν θησαυρῶν καὶ τοῦ ὅρους ἱερὸν Εἰλειθυίας, ἐν δὲ αὐτῷ Σωσίπολις Ἡλείοις ἐπιχώριος δαίμων ἔχει τιμάς. τὴν μὲν δὴ Εἰλείθυιαν ἐπονομάζοντες ᾿Ολυμπίαν, ἱερασομένην αἱροῦνται τἢ θεῷ κατὰ ἔτος ἔκαστον ἡ δὲ πρεσβῦτις ἡ θεραπεύουσα τὸν Σωσίπολιν νόμῳ τε ἀγιστεύει τῷ Ἡλείων καὶ αὐτή, λουτρά τε ἐσφέρει τῷ θεῷ καὶ μάζας κατατίθησιν αὐτῷ μεμαγμένας μέλιτι. ἐν μὲν δὴ τῷ ἔμπροσθεν τοῦ ναοῦ, διπλοῦς γὰρ δὴ πεποίηται, τῆς τε Εἰλειθυίας βωμὸς καὶ ἔσοδος ἐς αὐτό ἐστιν ἀνθρώποις ἐν δὲ τῷ ἐντὸς ὁ Σωσίπολις ἔχει τιμάς, καὶ ἐς αὐτὸ ἔσοδος οὐκ ἔστι πλὴν τῆ θεραπευούση τὸν θεόν, ἐπὶ τὴν κεφαλὴν καὶ τὸ πρόσωπον ἐφειλκυσμένη ὕφος λευκόν. παρθένοι

as Concerning Apollo as a rustic god of agriculture and of cattle-breeding, as also a protector of the youth, see Wernicke, in Pauly-Wissowa's Real-Encyclopacdicd, class, Alterthumswissenschaft, II. pp. 9 sqq. On Apollo as a god of childbirth, see Maass, Greifswalder Programm, De Aeschyli Supplicibus, p. 13 and id., in Hermes, XXV., 1890, p. 405 note 3.

⁸⁴ See Usener, Götternamen, p. 134, where Hegemone is compared with Abeona Adeona, Domiduca Interduca.

δὲ ἐν τῷ τῆς Εἰλειθυίας ὑπομένουσαι καὶ γυναῖκες υμνον ἄδουσι. καθαγίζουσι δὲ καὶ θυμιάματα παντοῖα αὐτῷ, ἐπισπένδειν οὐ νομίζουσιν οἶνον. καὶ ὅρκος παρὰ τῷ Σωσιπόλιδι ἐπὶ μεγίστοις καθέστηκεν... σὺν δὲ αὐτῷ σέβεσθαι καὶ τὴν Εἰλείθυιαν ἐνόμισαν, ὅτι τὸν παῖδά σφισιν ἡ θεὸς αὖτη προήγαγεν ἐς ἀνθρώπους.— The text of Pausanias concerning the locality of the temple of Eileithyia is corrupt. Professor Robert has made a very plausible suggestion in the Mittheil. d. arch. Inst. in Athen, XVIII., p. 38, that after πρὸς τὴν ἄρκτον the words | τῆς Ἄλτεως have fallen out.

Treu, in Olympia, Text-Band, III., p. 242, with pl. LIX., 10, reports that a statue of a boy playing with a goose, a votive offering to Eileithyia, was found west of the Heraion.

Professor Robert, in the Mitth. d. arch. Inst. in Athen, XVIII., pages 37 sqq., made an attempt to identify the Olympian temple of Eileithyia and Sosipolis with a small temple facing south, located between the Exedra of Herodes and the treasury of the Sicyonians. In two vital points, however, Professor Robert's temple does not agree with that of Eileithyia and Sosipolis. In the first place, it is not a double temple with an inner and an outer part, and in the second place, the altar is not in the front part of the temple, but outside of it. The sanctuary of Eileithyia and Sosipolis was doubtless west of the Heraion, there where the above-mentioned votive offering was found.⁸⁵

** Farnell, Cults of the Greek States, II. p. 611 note a, suggests that the female head, inscribed 'Ολυμπία, on fourth-century coins of Elis (Head, Hist. Num. p. 356) is that of Είλειθυια 'Ολυμπία. There does not, however, seem to be sufficient evidence for this suggestion. I confess myself to be entirely at a loss concerning this mysterious Eileithyia and Sosipolis episode. Was Eileithyia Olympia originally invoked in hymns as the mother of the mysterious Sosipolis? Why were the two worshipped in one and the same temple? The local legend arose, it is clear, to explain the meaning of the name Sosipolis. I doubt whether Farnell's interpretation of this divinity as the Zeus-Dionysos of Crete in the form of a boy is correct (ib. p. 612). Because Sosipolis was identified with Zeus at Magnesia on the Maeander is not sufficient reason for accepting the same identification in Olympia, no more than we have a right to identify the Heros Iatros at Athens with the heroes of the same title elsewhere.

Aigion

Paus. VII. 23, 5—6. Αἰγιεῦσι δὲ Εἰλειθυίας ἱερόν ἐστιν ἀρχαῖον, καὶ ἡ Εἰλείθυια ἐς ἄκρους ἐκ κεφαλῆς τοὺς πόδας ὑφάσματι κεκάλυπται λεπτῷ, ξόανον πλὴν προσώπου τε καὶ χειρῶν ἄκρων καὶ ποδῶν ταῦτα δὲ τοῦ Πεντελησίου λίθου πεποίηται. καὶ ταῖς χερσὶ τῆ μὲν ἐς εὐθὺ ἐκτέταται, τῆ δὲ ἀνέχει δᾶδα. Εἰλειθυία δὲ εἰκάσαι τις ἃν εἶναι δαιδας, ὅτι γυναιξὶν ἐν ἴσῳ καὶ πῦρ εἰσὶν αἱ ἀδῦνες. ἔχοιεν δ' ἃν λόγον καὶ ἐπὶ τοιῷδε αἱ δαιδες, ὅτι Εἰλείθυιά ἐστιν ἡ ἐς φῶς ἄγουσα τοὺς παιδας. ἔργον δὲ τοῦ Μεσσηνίου Δαμοφῶντός ἐστι τὸ ἄγαλμα.—

Coins from Aigion: Imhoof-Blumer and Gardner, Num. Comm. on Paus., pages 83 sq. with pl. R. VI., VII.; Frazer, Commentary on Paus. IV., p. 161, fig. 20. These coins represent Eileithyia, draped from head to foot, with a torch in each hand, the one in her right raised, the one in her left lowered, similar to the illustrations of the Argive coins. R. VI. wears a polos on her head, and is clad in a Doric peplos and apoptygma. Her hair hangs loose down her back. On R. VII., a coin in Paris, Eileithyia wears a different head-dress, which reminds one of that worn by Eileithyia on the black-figured amphora in Elite Cér. I., 65 A, or ib. I. 57. Eileithyia on the coin R. VII. is an active figure rushing forward, whereas on R. VI. she stands as stiff as an idol. R. VII. would correspond more accurately to the style of Damophon, who flourished in the middle of the fourth century B. C., and who, as Pausanias tells us, made the acrolithic image of Eileithyia in her sanctuary at Aigion. The coins do not, however, agree with Pausanias's description of the image, for he mentions only one torch. Professors Imhoof-Blumer and Gardner would therefore introduce δαs after ἐκτέταται in Pausanias's text. Perhaps one of the torches, which were very likely of bronze, set in the hands, had been lost in Pausanias's day.

But what is the meaning of the torches? Pausanias gives two explanations, as follows: The torch is an emblem of Eileithyia, because the travail-pangs burn like fire. Not well satisfied with this explanation he offers a second. Eileithyia is the goddess who brings children to the light of day. Professor Usener³⁰ asserts that Eileithyia carries the torch as attribute because she is a lunar goddess. The torch may refer to the purifying power of fire. It was indeed customary to burn incense in the house where a woman had given birth to a child, because she was considered unclean.³⁷ In this connection Professor Crusius called my attention to the old Roman custom of burning lights where a woman was brought to bed, for the purpose of frightening away the evil spirits. The comparison with the Roman Indiges Candelifera is instructive.³⁸

BURA

Paus. VII. 25, 9. Ναὸς ἐνταῦθα Δήμητρος, ὁ δὲ ᾿Αφροδίτης Διονύσου τέ ἐστι, καὶ ἄλλος Εἰλειθυίας. λίθου τοῦ Πεντελησίου τὰ ἀγάλματα, ᾿Αθηναίου δὲ ἔργα Εὐκλείδου · καὶ τῆ Δήμητρί ἐστιν ἐσθής.

There is reason to believe that the cult-image of Eileithyia in her temple at Bura, a work of the Athenian, Euklides, who flourished in the first half of the fourth century B. C., was nude, for Pausanias seems to imply as much by the phrase: καὶ τῆ Δήμητρί ἐστιν ἐσθής. Mr. Frazer, in his Commentary (IV., p. 170), compares this passage with another of Pausanias (II., 30. I) where a nude statue is opposed to a draped one, by making use of the same phraseology: ᾿Απόλλωνι μὲν δὴ ξόανον γυμνόν ἐστι . . . τῆ δὲ ᾿Αρτέμιδί ἐστιν ἐσθής. Mr. Farnell, in his Cults of the Greek States, II., p. 613, considers a nude Eileithyia an absurdity. because of her relationship to Hera, Artemis, the Moirai, and the

²⁶ Usener, in Rheinisches Museum, XXIII. p. 333.

⁸⁷ Cp. the woman burning incense on the so-called Ludovisi-Throne: Wolters, in Έφημερις άρχαιολογική, Χ., 1892, p. 228.

^{**} See Crusius, in Roscher's Lexikon, I. p. 850; cp. Mannhardt, Waldund Feldkulte, II. p. 125 note I. "So brennt in deutschen Bauernhäusern ein Licht neben der Wiege, bis das Kind getauft ist, damit die Unterirdischen, Zwerge, die Roggenmuhme u. s. w. es nicht abtauschen."

Tyche of the state, and also because Eileithyia appears on the coins of Bura in full attire. These coins, however, refer more probably to Demeter, who is quite frequently figured as a standing draped goddess holding a torch. Until we have better evidence for denying the fact, I prefer to consider the cult statue of Eileithyia at Bura as undraped.

PELLENE

Paus. VII. 27, 8. *Εστι δὲ καὶ Εἰλειθυίας Πελληνεῦσιν ἱερόν τοῦτο ἐν μοίρο τῆς πόλεως τῆ ἐλάσσονί ἐστιν ἱδρυμένον.

KLEITOR

Paus. VIII. 21, 3. Κλειτορίοις δὲ ἱερὰ τὰ ἐπιφανέστατα Δήμητρος. τὸ δὲ ᾿Ασκληπιοῦ, τρίτον δέ ἐστιν Εἰλειθυίας *** εἶναι, καὶ ἀριθμὸν ἐποίησεν οὐδένα ἐπ᾽ αὐτοῖς · Λύκιος δὲ ᾽Ωλὴν ἀρχαιότερος τὴν ἡλικίαν, Δηλίοις ἔμνους καὶ ἄλλους ποιήσας καὶ ἐς Εἰλείθυιαν [τε], εὔλινόν τε αὐτὴν ἀνακαλεῖ, δῆλον ὡς τῆ Πεπρωμένη τὴν αὐτήν, καὶ Κρόνου πρεσβυτέραν φησὶν εἶναι.

We have above, on page 20, claimed Eileithyia as the protecting deity of women in general, and have assigned an Eileithyia to every woman just as every woman has her Moira. The Delian Eileithyia-Hymnos of the mythical bard Olen, which was also sung at Kleitor—for if this were not so, it would be difficult to explain why Pausanias mentions the hymn in this connection—speaks of the goddess as eclaros 'the spinner deft,' in other words as a Moira or goddess of destiny. She is in truth a dispenser of destiny, deciding whether it is the child's fate to be born dead or alive. Since this is her function, we cannot separate the two divine types, Eileithyia and Moira. Man's fate is decided at his birth, in the presence of the goddess of birth and the Moirai. Besides the old Delian Hymn we have other evidence, both liter-

^{**} See Imhoof-Blumer and Gardner, I. c. p. 88 with pl. S 1.

ary and monumental, for this conception of Eileithyia as a goddess of destiny. Pindar (Nem. VII., 1) invokes Eileithyia as the goddess that 'sitteth beside' the Moirai, and he lets (Ol. VI. 41-42) the Moirai and Eileithyia assist Euadne in her laborpains. On a black-figured vase (Monum. dell' Instituto, VI., 56, 2), illustrating the birth of Athena, we have besides two Eileithyiai perhaps also the Moirai present. They are at least exceedingly like the Moirai attested by an inscription on the François vase (Wiener Vorlegeblätter, 1888, pl. 2). The sculptor of the east pediment of the Parthenon, which represented the birth of Athena from the head of Zeus, let Moirai take the place of Eileithyiai (see below, page 83). Again, Plato (Symp. 206 D) holds Eileithyia and Moira to be parallel figures: Μοῖρα οὖν καὶ Εἰλείθυια ή Καλλόνη ἐστὶ τ $\hat{\eta}$ γενέσει. Furthermore, Eileithyia and Moira are mentioned in an epigram (Kaibel, Epigrammata Graeca, No. 238) concerning a woman who died in child-bed. Nikanor (quoted by Antoninus Liberalis, Transform. 29) tells us that the Moirai and Eileithyia, by command of Hera, retarded Alkmene's delivery. And finally in the Isyllos-Hymnos⁴¹ Lachesis is treated as Eileithvia. But it is not only in Grecian mythology that the Fates are present at the birth. In Egypt too the idea was prevalent that the Hathors in their character as goddesses of destiny presided at the birth of a child.42 Even the Etruscans had the same conception, as is clear from an incised illustration on a bronze mirror. For, at the birth of Dionysos from the thigh of Zeus (Gerhard, Etruskische Spiegel, I., pl. 82) Thalna, the goddess of childbirth, is assisted by a winged goddess of destiny, Mean. On Roman reliefs depicting birth-scenes the Fates take

⁴⁰ See Usener, in Rheinisches Museum, XXIII. pp. 368 sqq.; cp. Tümpel, in Roscher's Lexikon, II. 1, p. 936.

⁴¹ See v. Wilamowitz, in *Philologische Untersuchungen*, Heft IX. 1886, p. 13 line 18. and p. 15; also Kabbadias, τὸ lερὸν τοῦ ᾿Ασκληπιοῦ ἐν Ἐπιδαύρφ (Athens, 1900), p. 214 line 50.

⁴² See Erman, Aegypten, pp. 502 sq.

the place of Eileithyiai. Nor is it out of place to call attention in this connection on the one hand, to the sacrifice to the Moirai and Eileithyiai at the Roman secular games, and on the other, to the well-known passage in the *Carmen Saeculare*, where the Moirai are called upon immediately after Eileithyia. We have, indeed, ample proof that Eileithyia is a goddess of destiny and as such the protecting deity of women.

MEGALOPOLIS

Paus. VIII. 32, 4. τῷ δὲ Ἑρμῆ καὶ Ἡρακλεῖ καὶ Εἰλειθυία πρόσεστιν ἐξ ἐπῶν τῶν Ὁμήρου φήμη, τῷ μὲν Διός τε αὐτὸν διάκονον εἶναι καὶ ὑπὸ τὸν Αιδην ἄγειν τῶν ἀπογινομένων τὰς ψυχάς, Ἡρακλεῖ δὲ ὡς πολλούς τε καὶ χαλεποὺς τελέσειεν ἄθλους Εἰλειθυία δὲ ἐποίησεν ἐν Ἰλιάδι ώδῖνας γυναικῶν μέλειν.

Pausanias says nothing of an Eileithyia sanctuary here in Megalopolis, but the passage is so abrupt and so entirely out of connection with what precedes that we are forced to believe that a phrase referring to sanctuaries of Hermes, Herakles, and Eileithyia has fallen out of the text. If Eileithyia had no temple at Megalopolis, what would otherwise have led Pausanias just at that particular place to refer to the passage in the Iliad where that goddess is represented as caring for women in travail? And yet the excavations made by the English at Megalopolis brought not the slightest trace of an Eileithyia-temple to light,

^{**} For Roman reliefs depicting scenes of childbirth, on which the Fates are represented, see Raoul-Rochette, Monuments inédits, I. pl. 77 no. 2: a fragment of a sarcophagus in the Vatican Museum; Matz-Duhn, II. 3087, etc.; cp. K. Wernicke, in Archäologische Zeitung, 43, 1885, pp. 209 sqq. Perhaps also Millin, Gal. Myth. 53, 223—Baumeister, Denkmäler d. Klassischen Altertums, II. p. 1289; cp. Heydemann, 'Dionysos' Geburt und Kindheit.' Zehntes Hallisches Winckelmannsprogramm, 1885, pp. 15 sq.

[&]quot;See Mommsen, in Ephemeris epigraphica, VIII. p. 231 line 115; ib. pp. 258 sq. Horace, Carmen Saeculare, 13 sqq.

nor was there any inscription or ex voto found that might be attributed to her. 45

TEGEA

Paus. VIII. 48, 7. Τὴν δὲ Εἰλείθυιαν οἱ Τεγεᾶται, καὶ γὰρ ταύτης ἔχουσιν ἐν τἢ ἀγορᾶ ναὸν καὶ ἄγαλμα, ἐπονομάζουσιν Αὖγην ἐν γόνασι, λέγοντες ὡς Ναυπλίῳ παραδοίη τὴν θυγατέρα Ἄλεος ἐντειλάμενος ἐπανάγοντα αὐτὴν ἐς θάλασσαν καταποντῶσαι τὴν δέ, ὡς ἤγετο, πεσεῖν τε ἐς γόνατα καὶ οὖτω τεκεῖν τὸν παῖδα ἔνθα τῆς Εἰλειθυίας ἐστὶ τὸ ἱερόν. οὖτος ὁ λόγος διάφορος μέν ἐστιν ἑτέρῳ λόγῳ, λάθρα τὴν Αὖγην τεκεῖν τοῦ πατρὸς καὶ ἐκτεθῆναι τὸν Τήλεφον λέγοντι ἐς τὸ ὄρος τὸ Παρθένιον, καὶ τῷ παιδὶ ἐκκειμένῳ διδόναι γάλα ἔλαφον λέγεται δὲ οὐδὲν ἦσσον καὶ οὖτος ὑπὸ Τεγεατῶν ὁ λόγος.

From this myth we learn that Auge $\epsilon \nu \gamma \delta \nu \alpha \omega \tau$ was considered a primitive goddess of childbirth in Tegea, parallel to Helena in Argos, and that Eileithyia in a later period was identified with and finally supplanted her. Both being goddesses of light was sufficient reason for bringing them together. The goddess Auge was represented in her cult-statue as kneeling, that is, in the act of childbearing. When we recall that in the primitive idols the divinity of childbirth was usually a childbearing maternal goddess, we have reason to look upon Auge as one of the earliest Greek local goddesses of childbirth. We cannot therefore accept Mr. Farnell's interpretation of Auge as being originally a form of Artemis.

Euboia (?)

Artemis Βολοσία = Εἰλείθυια: Prokopios, Bell. Goth. 4, 22, inscription at Geraestum, Τύννιχος ἐποίει ἀΑρτέμιδι Βολοσία · οὕτω γὰρ τὴν

^{*} See Excavations at Megalopolis (Society for the Promotion of Hellenic Studies, Suppl. Rapers, I.), London, 1892.

[&]quot;See Welcker, Kleine Schriften, III. pp. 185 sqq.; Marx, in Mittheil. d. arch. Inst. in Athen, X. p. 177 sqq.; Wolters, in Έφημερις ἀρχαιολογική, X. 1892, pp. 213 sqq.; Frazer, in his commentary on Pausanias, IV. pp. 436 sq. For the birth-scene of Telephos on the Pergamene Telephos-frieze, see Robert, in Jahrb. d. arch. Instituts, III. 1888, p. 55 fig. N; pp. 56 sq. For Farnell's theory on Auge, see his Cults of the Greek States, II. pp. 442 sq.

Eἰλείθυιαν ἐν τοῖς ἄνω χρόνοις ἐκάλουν. (This passage I have taken from Farnell, Cults of the Greek States, II., p. 568, note 41^g, without being in a position to verify it.)

DELOS

Herodotos, IV. 35. φασὶ δὲ οἱ αὐτοὶ καὶ τὴν Ἦργην τε καὶ τὴν Ἦργην τε καὶ τὴν Ἦπιν ἐούσας παρθένους ἐξ Ὑπερβορέων κατὰ τοὺς αὐτοὺς τούτους ἀνθρώπους πορευομένας ἀπικέσθαι ἐς Δῆλον ἔτι πρότερον Ὑπερόχης τε καὶ Λαοδίκης. ταύτας μέν νυν τῆ Εἰλειθυίη ἀποφερούσας ἀντὶ τοῦ ωκυτόκου τὸν ἐτάξαντο φόρον ἀπικέσθαι, τὴν δὲ Ἡργην τε καὶ τὴν Ὠπιν ἄμα αὐτοῖσι τοῖσι θεοῖσι ἀπικέσθαι λέγουσι καὶ σφι τιμὰς ἄλλας δεδόσθαι πρὸς σφέων ·—

Paus, I. 18, 5 see above, page 13.

Concerning the Εἰλειθυιαῖον at Delos, the site of which is not yet known, we have the following inscriptions:

Homolle, in Bulletin de Corr. Hellénique, VI., 1882, p. 100. ib. p. 34 line 50 = Dittenberger, Sylloge Inscriptionum Graecarum, 367:

φιάλη καρυωτή · Κτησυλίς, 'Αριστολόχου θυγάτηρ, Πυθέου δὲ γυνὴ, Εἰλειθυίει.

ΒυΙΙ. Corr. Hellen. XIV. 1890, p. 412, lines 114–120. Ἐν τῶι Εἰλειθυιαίωι βατια κὴ ἐν πλινθείωι, ἡν ἀνέθηκε Κλεαρχίς φιάλη ἔκτυπα ἔχουσα Περσῶν πρόσωπα, Κτησύλιος ἀνάθημα ὁλκὴν ြΔΗ. ἀμφιδαῖ καὶ τύποι καὶ | ὄφεις καὶ δακτύλιοι καὶ κριθαί, ἀργυρᾶ, ὁλκὴν ΓΔΔΔΗ. πυρήνια χρυσᾶ καὶ ἐνδεσμίδες καὶ τύποι καὶ καρδία καὶ ἄλλα χρύσια, ὁλκὴν πάντων ΔΕΠ. ἄλλα ζωιδάρια τέτταρα, εν αὐτῶν ξύλινον ἐπίχρυσον, καὶ δακτύλιοι δύο, ὁ εἶς λιθάριον ἔχων καὶ ἐνώτι(α) ὁλκὴν ΕΗΗ. μῆλα ἐννέα ἐπάργυρα ΕΓ , ὁλκὴν ΕΗΗ. ἐρωτίωγ καὶ βουβαλίων ζεῦγος πρὸς ξύλωι, Θεσσαλίας ἀνάθημα ·

Καὶ τάδε ἀνετέθη ἐπὶ τῆς ἡμετέρας ἀρχῆς εἰς τὸ Εἰλειθυιαῖον: | δακτυλίδιον χρυσοῦν, ἀνδριάντιον, τυπίον, χρυσᾶ: ὁλκὴ πάντων Η. τυπίον ἀργυροῦν, ὁλκὴν Η δακτυλίδιον διάλιθον ἐν ταινιδίωι, Κερκίδος ἀν άθημα.—

Welcker, Kleine Schriften, III., p. 188, pl. I. Statuette of a kneeling woman, a votive offering to Eileithyia (?) (see below, p. 44).

PAROS

C. I. G. 2389. Φιλουμένη Σειληνῆς Εἰλειθυίη εὐχήν.—
 Wilhelm, in Mittheil. d. arch. Inst. in Athen., XXIII., 1898,
 p. 435. Ἐπικράτηα Εἰλευ|θύα εὐχήν (see below, p. 56).

For other votive offerings to Eileithyia from this grotto-sanctuary see pages 40, 51, and 52.

THERA

The Theran sanctuary of Eileithyia has not yet been found, although we have evidence that the goddess of birth had a temple at this place. See v. Hiller, Thera, I., p. 177. A decree dating from the time of Antoninus Pius mentions the Eileithyia-temple as the family possession of a certain T. Flavius Kleitosthenes Klaudianos. This great benefactor, to whom Thera was indebted for many other favors, allowed all citizens and strangers free admission to his private sanctuary of the birth-goddess. . . . \hat{a} dè kaì tò $\hat{\tau}\hat{n}$ Eìlei θv is lerdo \hat{a} dèkkt ϕ molu | τ election at ateipyas \hat{b} pou \hat{a} ateipyas \hat{b} election \hat{b} is \hat{b} election \hat{b} is \hat{b} election \hat{b} in \hat{b} is \hat{b} election \hat{b} is \hat{b} at \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} is \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} in \hat{b} is \hat{b} in \hat{b}

For a votive offering to Eileithyia as Kourotrophos, found at Thera, see below, page 43.

Besides Eileithyia, quite a number of lesser divinities of child-birth were worshipped in Thera during the archaic period, as is seen from the inscriptions cut into the living rock. Some of the most important of these are Lochaia and Damia, Koures=Kouro-trophos, the goddess Kale=Kallone and the Nymphs. The fact that Lochaia is here associated with Damia=Demeter, who in her turn was not infrequently mentioned in connection with Auxesia seems to point to an early conception of these divinities as being concerned with childbirth. This opinion gains weight when we recall that Damia and Auxesia were represented in their

cult-images at Epidauros on their knees, i. c., in the act of child-bearing. The possibility is not, therefore, excluded that Lochaia, Damia=Damometer and Auxesia were primary gods of childbirth and only in a secondary way gods of increase and fertility connected with agriculture and the breeding of domestic animals.

ASTYPALAIA

I. G. I. fasc. III. 192. Εὐξαμένα μἀνέθηκ εν ὑπὲρ χάριος τόδ ε ἄγαλμα
 ᾿Αρχὼ Ἐλειθύαι, τᾶι χάριν ἀντ ιδίδο(υ).

AMNISOS

Od. XIX. 188 sqq. στησε δ' ἐν ᾿Αμνισῷ, ὅθι τε σπέος Εἰλειθυίης, | ἐν λιμέσιν χαλεποῖσι, μόγις δ' ὑπάλυξεν ἀέλλας. | αὐτίκα δ' Ἰδομενη̂α μετάλλα ἄστυ δ' ἀνελθών.

The situation of the Cretan grotto of Eileithyia outside the city is noteworthy. In Paros also, as has been mentioned above, Eileithyia's grotto was outside the town.

Pausanias, I., 18, 5, see above, page 13, for Amnisos in Crete as the birthplace of Eileithyia. Cp. also Diodoros, V., 72. Τοῦ δὲ Διὸς ἐκγόνους φασὶ (οἱ Κρῆτες) γενέσθαι θεὰς μὲν ᾿Αφροδίτην καὶ Χάριτας, πρὸς δὲ ταύταις Εἰλείθυιαν καὶ τὴν ταύτης συνεργὸν Ἄρτεμιν.

"See v. Hiller, Thera, I. pp. 149 sq. I. G. I. fasc. III. 361; Lochaia and Damia. For Δαμία = Δαμζομ)ήτηρ see Crusius, in Philologus, XLIX. p. 675. I. G. I. fasc. III. 354-5 and 371: Koures alone; ib. 350: Koures associated with Zeus; in this connection, see Maass. De Aeschyli Supplicibus, pp. 13 and 38; id., in Hermes, XXV. 1890, p. 405 note 3: Kovρŷs = Kovροτρόφοs. I. G. I. fasc. III. 380: Kale; ib. 377, 378: Nymphs. That the Nymphs were considered goddesses of childbirth and had power over fruitfulness in marriage is evinced by a curious custom which is still practiced in Athens to-day. On the Hill of the Nymphs, namely, barren women slide down the rock in hopes that they will become fruitful. Cp. Wachsmuth, Das alte Griechenland im Neuen, p. 71. According to Euripides (El. 625 sq.) sacrifices were made to the Nymphs not only for the sake of offspring, but also after safe delivery. Cp. Maass, De Aesch. Suppl. pp. 17 and 37. On Damia and Auxesia, see Frazer's Commentary to Pausanias's Description of Greece, III. pp. 266 sqq.

Strabo, X. p. 476. Μίνω δέ φασιν ἐπινείψ χρήσασθαι τῷ ᾿Αμνισῷ, ὅπου τὸ τῆς Εἰλειθυίας ἱερόν.

EINATOS

Stephanus Byzantius, s. τι. Εἴνατος. πόλις Κρήτης, ώς Ξενίων φησί. τὸ ἐθνικὸν Εἰνάτιος. τινὲς δὲ ὅρος καὶ ποταμός, ἐν ῷ τιμᾶσθαι τὴν Εἰλείθυιαν Εἰνατίην.—

Kallimachos-Fragm. 168 Schneider: Εἰνατίην ὁμόδελφον (Martis) ἐπ' ωδίνεσσιν ἱδοῦσα.

LATO

Homolle, in Bulletin de Corr. Hellénique, III., 1879, p. 293: A state document of the three towns, Knossos, Lato and Olus, which should be treasured by the inhabitants of Knossos in their sanctuary of Apollo, by those of Lato $\dot{\epsilon}\nu$ $\tau\hat{\omega}\iota$ $\tau\hat{\alpha}s$ E $\lambda\epsilon\nu\theta\nu\dot{\alpha}s$ ($\iota\hat{\alpha}\rho\hat{\omega}\iota$), and by those of Olus in their sanctuary of Zeus Tallaios.

TEOS

C.~I.~G.~3058 = Le Bas, 67~... ἀγγράψαι δὲ καὶ τὸ δόγμα ἐς τὸ ἱερὸν τᾶς Ἐλευθυίας.

SIDYMA, IN LYCIA

Benndorf, Reisen in Lykien, pp. 75 sqq. A public record concerning the legendary history and cult of Sidyma, p. 77 No. 53, Da. lines 7 sqq.:

οὐ μόνον ἀπὸ θεῶν | καὶ κτιστῶν αὐτοχθόνων οὕσης | ἀπ' ἀρχῆς ἡμεῖν πρὸς Σιδυμεῖς | ὡς τέκνων πρὸς γονεῖς ἀδια | λείπτου ἐν παντὶ καιρῶ ἑνότη τος καὶ ὁμονοίας, μέχρι νῦν τετη | ρημένης καὶ ἐπιγαμίαις, παρθέ | νων σεμνὰς νεοκορείας τῆς | άγνοτάτης καὶ παρ' αὐτοῖς ᾿Αρτέ | μιδός τε [καὶ] Εἰληθυιῶν, ἡ πρόσθεν | ἡροῦντο γυν[αῖ]κες ἱέρεια[ι,] | ὕστερον δὲ κατ' ἐπισζήτη[σιν] | καὶ θεουλογίαν μέχρι καὶ νῦν πα[ρ] | θένοι, . . .

ITALY

Mommsen, in *Ephemeris epigraphica*, VIII., p. 231, line 115: a sacrifice: deis [I] lithyis libeis VIIII popan [is] VIIII pthóibus VIIII . . . —

Horace, Carmen Saeculare, 13 sqq.: ".

Rite maturos aperire partus Lenis, Ilithyia, tuere matres Sive tu Lucina probas vocari Seu Genitalis.

Diva, producas subolem patrumque Prosperes decreta super jugandis Feminis.

Pyrgoi

Strab. V. 226. ἔχει δὲ Εἰληθυίας ἱερόν, Πελασγῶν ΐδρυμα, πλούσιόν ποτε γενόμενον ἐσύλησε δ' αὐτὸ Διονύσιος ὁ τῶν Σικελιωτῶν τύραννος κατὰ τὸν πλοῦν τὸν ἐπὶ Κύρνον. The mistress of this sanctuary is however Mater Matuta and not Leukothea or Eileithyia."

HERAKLEOPOLIS (EGYPT)

Aclian. Nat. anim. Χ. 47. λέγονται δὲ οἱ ἰχνεύμονες ἱεροὶ εἶναι Λητοῦς καὶ Εἰλειθυιῶν σέβουσι δὲ αὐτοὺς Ἡρακλεοπολίται, ὧς φασιν.

EILEITHYIASPOLIS

Strab. XVII. 817. εἶτε Εἰλειθυίας πόλις καὶ ἱερόν.—Steph. Byz. Εἰληθυίας, πόλις Αἰγυπτιακή. τὸ ἐθνικὸν Εἰληθυιοπολίτης.— Diodor. I. 12 τῆς γὰρ πάσης οἰκουμένης κατὰ μόνην τὴν Αἴγυπτον εἶναι πόλεις πολλὰς ὑπὸ τῶν ἀρχιιίων θεῶν ἐκτισμένας, οἷον Διός, Ἡλίου, Ἑρμοῦ, ᾿Απόλλωνος, Πανός, Εἰλειθυίας, ἄλλων πλειόνων.

⁴⁸ See Maass, De Aeschyli Supplicibus, pp. 35 sq.

[&]quot;See Wissowa, in Roscher's Lexikon, II. 2, pp. 2462 sqq.

CHAPTER III

VOTIVE OFFERINGS TO DEITIES OF CHILDBIRTH

Whatever is a source of pleasure to man is a suitable gift for the gods. Consequently it was proper to dedicate not only the image of the god whom one wished to honor, but also the likeness of the dedicator himself. Gifts of this kind were set up in the sanctuary of the god concerned for several reasons, but most commonly to appease the divinity. Not infrequently, however, were they dedicated in connection with some vow, after the deity had granted the wish of the votary. When, however, the image of the god was offered as an ex voto, it was customary to represent the divinity in the type of its cult-statue. Original cult-images are rare, but we can frequently form a fair idea of their appearance by means of the votive offerings which copy the type. It is hardly necessary to say that no real cult-image of Eileithyia has come down to us, and that in the case of the votive offerings, it is often difficult to decide whether the goddess is meant or the woman who made the dedication, unless attributes and accessories make the meaning clear.

In one case, however, there can be no doubt that Eileithyia herself is represented in imitation of her cult-statue. This is a bronze statuette belonging to the sixth century B. C., now in the British Museum.⁵⁰ It is doubly valuable to us because it bears an inscription, which, although we do not know where the statuette was found, throws light on its provenance. The goddess

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⁵⁰See Walters, Catalogue of Bronzes in Brit. Mus. p. 16 with pl. II. no. 188; Farnell, Cults of the Greek States, II. p. 614 with pl. LIX; Gerhard, 'Ueber Venusidole,' Kleine Schriften und Gesammelte Akademische Abhandlungen, I. p. 265 with pl. 31 fig. 6.

stands erect with archaic stiffness, in a state of rest; the heels are close together, but the right foot is turned outward. The weight of her body is equally distributed on both feet, without the slightest indication that one of the legs might be bent at the knee. She wears sandals, and on the right one, which is in better state of preservation than the left, an incised design is visible. The goddess is clothed in the Doric peplos with a fold falling to her waist, but she does not wear a girdle, for there is no trace of a kolpos. The edge of the apoptygma and the lower seam of her garment are ornamented with an incised pattern of zigzag lines filled in with circles. She lifts her garment with her left hand in the customary archaic fashion. On her head she wears a remarkable polos. Her hair is parted in the middle, is taken up in back and held in position by a narrow fillet or sphendone. The expression of her face is stern, nay, even grumbling. Her breasts are more strongly accentuated than is customary on portrait-statues of this period. In her extended right hand she holds very daintily a calycine flower, in all probability as a symbol of fertility. The flower as attribute of a goddess of childbirth is not unknown. We find it, for example, on the archaic lime-stone reliefs found near Argos, which represent the Eumenides as deities of childbirth. In Sikvon also offerings of flowers, of honey mixed with water, and of sheep heavy with young, were made to the Eumenides and Moirai, doubtless in connection with the same cult. 82 But to return to our statuette of Eileithvia. The inscription mentioned above is on the lower part of her garment, and runs from her feet to her waist. Since the drapery falls without folds, concealing the form of the body beneath, it offers a very suitable surface for the inscription, which reads as follows:

a Milchhoefer, in Mittheil. d. arch. Inst. in Athen, IV. 1879, pp. 152 sq., 174 sqq. with pls. IX. X.

⁵⁸ See Pausanias, II. 11, 4.

' Αριστομάχα ἀνέθεκε τᾶ ' Ελευθία.

The form Eleuthia occurs on the above-mentioned votive relief from Hippola (see above, page 25). But our inscription cannot be Laconic, because of the form of $+ = \chi$, whereas in Lakonia at this time—end of the sixth century B. C.—the letter χ is expressed by Ψ . As far as I know there has been no attempt to classify this bronze statuette by making use of the peculiar shape of the letters in the inscription, although to my mind it can be done with absolute certainty. The letters agree exactly with those of Corinth, and so I do not hesitate to assign our statuette to the Corinthian School of Art. I have therefore above, on page 21, held this image to be a small copy of the cultstatue of Eileithyia in her temple at Corinth. But the results are even more far-reaching than this, for we now have a fair example of archaic Corinthian sculpture, of which up to the present so little was known. The closest analogy is found in the bronze figurines supporting mirrors on their heads, acknowledged to be of Corinthian workmanship.

Dr. Rubensohn is inclined to recognize an Eileithyia in a figure on a relief found during his recent excavations in the Eileithyia-grotto at Paros. We shall have occasion to mention this relief again (see below, page 80) because of the rays of light surrounding the head of the goddess. At the same grotto-sanctuary Dr. Rubensohn found a small marble figure, enthroned, and several terra-cottas of the same type, which are presumably copies of the Paros cult-image of Eileithyia. But it must be admitted that exactly the same type of enthroned female figure was found in the Delion at Paros. If these figures do not represent the dedicators themselves, which is quite possible, they may be interpreted on the one hand as Artemis or Leto, and on the other as Eileithyia. If Leto and Artemis were considered god-

desses of childbirth in the Delion, and were consequently represented in the type of Eileithyia, we would have another interesting illustration of how the type of one god can be transmitted to another deity of similar function. In the case of Asklepios and other lesser divinities of healing such a diffusion of type is not uncommon. Until, however, the Parian finds are published we shall not be able to reach final results concerning this point.⁵⁰

Of portrait-statues representing the dedicators themselves, set up in honor of Eileithyia, we have no known examples, although we have sufficient evidence through inscribed bases of statues of this sort, that they were quite common. Such votive offerings were made oftenest by women so as to have a speedy and easy delivery, being thus of a propitiatory nature. Quite frequently, however, they were dedicated by mothers after the birth of the child, in acknowledgment of their quick labors.

Since it is impossible to prove in every instance whether the votive offerings suitable to deities of childbirth were gifts to Eileithyia or not, I have decided to enumerate typical examples of all the ex votos of this sort. For even if they were not in reality offered to Eileithyia, they are at least gifts which might under other circumstances or at other places be appropriate presents for her. Wherever it is possible, I shall mention the divinity to whom the gift was made, and in this way we shall be able to include in the list of deities of childbirth some gods whose functions along these lines were hitherto unknown to us.

It is a popular motive to represent the goddess of childbirth as a divine nursing mother, a cherisher of children, or Kourotrophos as she was called by the Greeks. In this type she holds one, two, or sometimes even quite a number of children on her arm. When the figure holds only one child it represents, no doubt, very frequently a human mother with her offspring. It

⁶⁸ For a preliminary report on the excavations of the Eileithyia-sanctuary and of the Delion at Paros, see *Archäologischer Anzeiger*, 1900, pp. 19 sqq.

is impossible to distinguish the divine and human types unless the artist makes his meaning clear by attributes or other accessories. At Thisbe was found a terra-cotta group⁵⁴ representing a goddess as Kourotrophos with two children—they need not be twins, divine or human—on her left arm. Her breasts are exposed. In the Berlin Museum are similar terra-cottas and lime-stone groups found at Curti in Italy,⁵⁵ and in the Ashmolean Museum at Oxford (No. 338) I saw, among the terra-cottas, a seated Kourotrophos suckling a baby. On the back of the chair a swastika is incised. We shall no more attempt to assign a name to the Kourotrophos of Thisbe and of Curti than we did in connection with the pre-historic and archaic Kourotrophoi, because almost any goddess may serve in this capacity. Only when the

⁵⁴ See Marx, in Mitth. d. arch. Inst. in Athen, X. 1885, p. 91

⁵⁵ See the Berlin catalogue, Beschreibung der antiken Skulpturen, nos. 161-167. See also v. Duhn, in Bullettino dell' Inst. 1876, pp. 171-192; ib. 1878, pp. 13-32. Other literature on the finds at Curti is given by v. Duhn, l. c. 1876, p. 177 note 2.—Berl. Antiquarium, inv. no. 7143: a goddess with a polos on her head, and a child in her arm; no. 7144: a goddess nursing a child. Cp. Usener, Götternamen, p. 128.—Difficult to interpret is the reclining figure of a woman with a child at her breast, depicted, amongst other symbols intended to serve as a protection against the evil eye, on bronze votive hands (Jahn, 'Ueber den Aberglauben des bösen Blicks,' Sächs. Ber. 1855, p. 101 sq. with pl. IV. 2 a, b=Baumeister, Denkmäler d. klass. Altertums, I. p. 75 figs. 75a and 75b.). Perhaps the reclining female figure on these amulets represents some Kourotrophos under whose protection the child was placed at its birth. Jahn himself believed that bronze hands of this sort must be explained as votive offerings for successful delivery, and the same interpretation is given by Dilthey, in Arch. Epigs Mittheil. aus Oesterreich, II. p. 46. Cp. the deductions of Maass, De Aeschyli Supplicibus. concerning the healing of Io and the birth of Epaphos by means of the touch of Zeus's hand (see below p. 90 note 140). In the British Museum Catalogue of Bronzes under no. 875 a different interpretation is advanced, to the effect that perhaps Isis with Horus are represented in these figures, and that they are lying within a tumulus which is shown in section.—A similar type of a woman reclining entirely nude on a couch has been found in Naukratis. We have in these reclining figures no doubt childbirth dedications to Aphrodite, as Mr. Gutch (British School Annual, V. p. 82 nos. 49-56 with pl. 14 figs. 1-5) has suggested. See also Naukratis, I. p. 40 with pl. XIX. 7, 8 and 9. An example of this type can also be seen in the Ashmolean Museum, Oxford (Case 2 S.).

name of the precinct in which this type has been found is known, as, for instance, in the Argive Heraion, are we able to assign a name. Besides Hera we have evidence that Athena plays the part of divine nurse, as is clear from the Erichthonios legend, and from a statue in Berlin⁵⁵ where she is represented as carrying the child Erichthonios in her aegis. Professor Hiller von Gaertringen informs me in a letter that during his most recent excavations at Thera he found a marble fragment of a woman carrying a child. The woman or the goddess (?) was draped only from her waist down. Professor Hiller von Gaertringen is of the opinion that the statue was originally set up in the Theran Eileithyia-sanctuary, the site of which has not yet been discovered.

Another suitable subject for dedication to divinities of child-birth is the very scene of the birth, modelled in marble, either as a group worked out in the round or in relief. In case the votary was of humbler means, the deity had to be content with a similar present in terra-cotta. A scene of a naked woman in labor is represented in a marble group of the sixth century B. C. found near Sparta. This most valuable monument for the history of obstetrics is now in the museum at Sparta. A kneeling woman about to be delivered, is supported by two male demons of child-birth, one of whom is of actual assistance by giving her massage, while the other is holding his hands to his lips, doubtless a gesture of superstitious meaning unknown to us. Her complete nudity, her delicate condition, the kneeling posture, and the

⁵⁶ See the Berlin catalogue, Beschreibung der Antiken Skulpturen, p. 37 no. 72. Cp. Reisch, in Jahreshefte d. Oesterr. Inst. I. p. 72 fig. 35 'Athena Kourotrophos 'mit der Ciste,' '=Gardner, in Journal of Hellenic Studies, 19, 1899, p. 7 fig. 2.

VI. Hoernes, Urgeschichte, p. 434 (fig. 133) discusses this group, but explains it differently: "Diese Frau kann wohl nur im mütterlichen Verhältniss zu den kleinen männlichen Gestalten stehen." But Hoernes stops in his interpretation just where the difficulty begins. If the male figures are her children, how can their attitude be explained, or why is the woman represented on her knees?

gestures of the male assisting demons, who may be compared with the di nixi of the Romans, have given Dr. Marx the correct clue for his interpretation. In the case of the marble statuette from Delos, representing a kneeling female figure (see above, page 33), there is room for doubt whether a human person in the act of being delivered is meant, or whether it might not just as well refer to the goddess of childbirth Leto or Eileithvia in the position of child-bearing. The question is discussed at length in the article of Professor Welcker cited above. Milchhoefer (Mitth. d. arch. Inst. in Athen, IV., p. 66), however, gives guite a different interpretation. We can, on the other hand, interpret with absolute certainty a kneeling female figure with both hands on her abdomen as a goddess of childbirth, because of her peculiar head-dress, which no human being would ever wear. The statue referred to is in the Louvre, and is illustrated in Clarac-Reinach, II.2 p. 682 fig. I. Quite unique is a terra-cotta vase found in Vetulonia, moulded in the shape of a nude kneeling woman in the throes of childbirth pressing her hands convulsively to her breast. At the same place a fragment of a relief was found, which presumably represented a kneeling child-bearing woman. The gesture of the hands is the same as on the vase from Vetulonia.58 Under the same head must be classified a terra-cotta statuette found in Cyprus, which represents a pregnant woman, clothed, who holds her right hand on her abdomen, as though she were suffering pain." In Palestrina there was in Professor Gerhard's time a remarkable marble group, called by him Demeter

¹⁸ The vase is illustrated in the *Notizie degli Scavi*, 1894, p. 348 fig. 20; and the fragment of the relief, *ib*. 1893, p. 511 fig. 7. Perhaps the relief was not a votive offering, but a tombstone, erected over the grave of a woman who had died in child-bed. That grave-reliefs representing scenes taken from the last moments of women who had died in the throes of childbirth were not unknown, has been pointed out by Wolters, in Εφημερls ἀρχαιολο γική, X. 1892, p. 229 note 2.

⁵⁹ See Perrot et Chipiez, Histoire de l' Art dans l' Antiquité, III. p. 201 fig. 143.

and Kore." He reports: "Beide stehen aufrecht, aber nur etwa bis an die Knie reichend, auf einem Gestell, dessen Seitenfläche mit einer Schlange verziert ist, während oberwärts neben jeder der beiden Figuren zwei Löwenköpfe, auffällig in Ermangelung sonstiger Symbole des phrygischen Dienstes, bemerklich sind. Die Köpfe beider Figuren fehlen." Professor Gerhard is wrong in saying that both figures stood upright, being modelled only to their knees, for there can be no doubt that the two goddesses are kneeling, whereby they can be identified as goddesses of childbirth. On both figures the hair hung loosely down the back, while a few separate locks hung in front over the breast, traces of which can still be seen. The snakes prove that we have chthonic divinities of childbirth in this group. They remind one of Damia and Auxesia, above all else. Professor Conze is right in recognizing the Phocaean Artemis as a goddess of childbirth in a figure found in Massilia. The goddess is standing upright, in a small aedicula, in the type of a woman in travail.62 This was doubtless a votive offering to Artemis for a speedy delivery. Concerning the reliefs of the so-called Ludovisi-Throne it is impossible to know their exact purpose and use, although Professor Wolters with great ingenuity has interpreted the figures correctly as a woman in travail assisted by midwives, divine or human. On the island of Cyprus a lime-stone group was found—it is now in the Metropolitan Museum, New York —which represents a woman seated on a

See Gerhard, Antike Bildwerke, III. 4 p. 47, and id., Abhandlungen, II. pp. 390 sq., 551, with pl. 49, 1.

⁵¹ See above p. 35 note 47.

⁶² See Conze, in *Archäologischer Anzeiger*, 1866, p. 306 pl. B*. Among the terra-cottas of the British Museum I saw a similar figure from Naukratis, labelled C575.

⁶⁸ See Wolters, in Έφημερις ἀρχαιολογική, X. 1892. pp. 227 sq.; Petersen, in Mittheil. d. arch. Inst., Röm. Abt. VII. 1892, pp. 32 sq. with pl. II.—Antike Denkmäler, II. 1, pl. 6, 7—Furtwängler, Masterpieces of Greek Sculpture, p. 487. Cp. Petersen, in Mitt. d. arch. Inst., Röm. Abt, XIV. 1899, p. 155. Prof. Petersen misinterprets this relief as the birth of Aphrodite, and asserts that his interpretation is strengthened by the picture on a hydria

chair of delivery, and supported by a woman who kneels behind her. In front of her crouches the midwife holding the newly born babe in her arms. As an example of a votive offering of poor people to a goddess of childbirth, the terra-cotta group representing a birth-scene, which was found in Cyprus and is now in the Louvre, Paris, is of importance. The woman in labor is seated in the lap of another woman, who is giving her massage, whereas a second midwife kneeling before this group is performing her duties. By a careful sifting of the monuments additional votive offerings of this sort can no doubt be found. Unfortunately, we are seldom in a position to name the goddess concerned. If this were possible, the material cited above would be of far greater value.

That mothers took pleasure in offering their own images in the type of Kourotrophos has been noted above. But also the proud father did not wish to be forgotten. A votive offering of this kind to Diana at Nemi in her capacity of a goddess of child-birth was found during the excavations made by Lord Savile at the lake of Nemi. It represents a terra-cotta group of a married couple, draped only from the waist down. They are seated close together on a broad chair or throne, and the husband puts his left arm around the neck of his wife. From a photograph of this group, for which I am indebted to Mr. Wallis, it can be

in Genoa which actually does depict the birth of Aphrodite. This very vase-painting, however, offers to me, at least, the best proof that the relief cannot be explained in like manner. The votive relief from the Artemision at Nemi, representing a parturition-scene, mentioned by Preller-Jordan, Röm. Mythologie, I. p. 317 seems to have disappeared.

⁶⁴ Illustrated in Cesnola, Coll. of Cypriote Antiquities (Metrop. Museum), I. pl. LXVI. fig. 435—Ploss, Das Weib⁸, II. p. 181 fig. 129. I was unable to procure the article of Morgoulieff, Étude critique sur les monuments antiques representant des scènes d'accouchement.

⁸⁵ See Perrot et Chipiez, Histoire de l' Art dans l' Antiquité, III. p. 554 fig. 378. Cp. Marx, in Mitth. d. arch. Inst. in Athen, X. p. 188. For the custom of giving birth seated in the lap of another, see Ploss, Das Weib⁸. II. pp. 163 sqq. and pp. 181 sqq.

clearly seen that the woman holds a child in her lap. Originally this child was overlooked and the woman was described as pregnant. A second copy of the same group has found its way to Chicago, and is now in the Art Institute.

In the British Museum there is a remarkable relief on the base of a statue now lost. It was found at Sigeion. The relief represents a seated child-nursing goddess to whom three mothers carrying babes in swaddling-clothes are doing homage. A fourth woman seems to be approaching in order to make a sacrifice. It was a custom well known and practiced throughout Greece, that grateful parents showed their appreciation to the goddesses who took charge of the actual processes of birth, by dedicating to them their offspring. In the inscriptions quoted above under the different localities where sanctuaries of Eileithyia are known to have existed, frequent mention is made of a father or a mother dedicating their son or daughter to Eileithyia as a thank offering. In other words, the child was put under the protection of this divinity at a very early age. The Sigeion relief is an illustration of this custom. Whether the statue which stood on the base decorated with such scenes represented Eileithyia or some other goddess of childbirth is not known. The possibility is not excluded that the base bore a family group, on the order of the small terra-cotta just mentioned. If this is true we have a votive offering of a very wealthy family.—The figures of women carrying infants in swaddling-clothes remind one of a most interesting bronze statuette published by Gerhard. It represents

⁶⁶ See G. H. Wallis, Catalogue of classical antiquities from the site of the temple of Diana, Nemi, Italy, p. 19 no. 66. The example in the Art Institute of Chicago I saw in Room 15, Case 16.

[&]quot;Catalogue of Greek Sculpture, British Museum, I. p. 362 no. 789; Museum Marbles, IX. pl. 11.—The Attic tombstone illustrated in J. P. Mahaffy's Greek Pictures, p. 99, may represent a Kourotrophos with an infant in her arms, worshipped by a mother carrying a baby in swaddling-clothes.

⁶⁸ Illustrated in Gerhard, Akadem. Abhandlungen, pl. 49, 3.

a woman carrying a baby in swaddling-clothes on her left arm, whereas, in her right hand she holds a pig. The woman is, I imagine, about to sacrifice the pig as a thank offering for the easy delivery of her child. Similarly, live pigs, also snakes and 'figures of men' (phalloi) made of dough were sunk into the earth at the Thesmophoria as an offering for agrarian and human fertility. We have sufficient evidence, legendary and monumental, that Athena was worshipped on the Akropolis of Athens as Kourotrophos. To my mind there can be no doubt that an archaic relief ('Εφημ. ἀρχ., IV., 1886, pl. 9; Brunn-Bruckmann, Denkmäler griech. u. röm. Skulptur no. 17) found on the Akropolis, is a votive offering to Athena Kourotrophos dedicated by a devout couple. It is noteworthy that on this occasion Athena does not wear her aegis, and that the worshipping family is about to sacrifice a pig. The cause for this offering is clear when we note the condition of the mother, for she is with child. Since the dedication of this relief was made before the birth of the child we learn that Athena is not only a cherisher of children, but also a protectress against miscarriage and a warder off of barrenness, in other words a secondary goddess of childbirth. No wonder then, that she was represented with the child Erichthonios, no wonderthattwo Errhephoroi were connected with her cult on the Akropolis, and that she was in many ways interested in the life, growth and prosperity of the family. To —Under the same head must be catalogued the votive relief to Eleuthia, i. e., Eileithvia found in the neighborhood of the ancient Hippola, which represents a woman with three children making a sacrifice at a burning altar (see

⁶⁰ On the Thesmophoria, see Preller-Robert, Griech. Mythologie, I. pp. 1778 sqq.; Bloch, in Roscher's Lexikon, II. 1, pp. 1331 sqq.; A. Mommsen, Feste der Stadt Athen, p. 314; E. Rohde, Kleine Schriften, II. pp. 362 sq. pp. 378 sq.; Miss Harrison. Mythology and Monuments of Ancient Athens, pp. 102 sqq.

⁷⁰ On Athena Apatouria. Phratria and Meter, see Farnell, *The Cults of the Greck States*, I. pp. 302 sq. See also Preller-Robert, *Griech. Mythologie*, I. pp. 218 sq.

above page 25), and also a small votive tablet from Lakonia, now in the British Museum.ⁿ

The dedication of children in swaddling-clothes on their mothers' arms, such as we have seen, for instance, on the base from Sigeion, a monument of the fourth century B. C., leads us to another kind of votive offering,—I refer to the countless terracotta reproductions of infants in swaddling-clothes, found, to be sure, mostly in Italy, although they are not unknown in Greece. We learn from these that children were dedicated to the deities of childbirth at a very early age, long before they were conscious of the fact, perhaps in connection with some vow on the part of the parents. The situation may have been somewhat as follows: Before its birth the wife promises to dedicate her child to that particular deity in whom she has most faith as divine midwife. If the birth be speedy and in all respects successful, the promise is fulfilled and the parents offer up the newborn babe as εὐχήν οτ εὐχαριστήριον. Unless there really was a custom of this kind in ancient times it would be impossible to explain the large number of swaddled children found, for the most part, in Italian sanctuaries. Dedications of this kind, made to a primary deity of childbirth, must not be confused with the dedications of children from the age of three to six made to some guardian divinity under whose protection they were placed. And yet it happened occasionally that one and the same goddess was worshipped not only as taking charge of the actual processes of birth, but also as being the nourisher and protectress of children. In some localities, as we shall soon see, Eileithyia had both functions to perform.—But to return to our votive offerings. In Curti near Capua, in Palestrina, and in Nemi terra-cotta infants in swaddlingclothes were found in such abundance that almost every European collection has some examples. Sometimes they are almost lifesized and wear a pointed hood or pilos. Quite frequently they are

ⁿ See Milchhoefer, in Mittheil. d. arch. Inst. in Athen, II. p. 432, no. 5.

represented as lying in a cradle. In Greece the type is rarer. I am inclined to interpret the terra-cotta twins from Thebes, Olympia and Kyzikos in this manner, although I am aware that they are usually held to be the Dioscuri.

And yet, as has been already intimated, children were dedicated to Eileithyia not only as a goddess of childbirth but also as a divine guardian. Professor Furtwängler calls attention to the fact that the statues of little girls at play, ranging from three to six years of age, found in Agrai had been presented to Eileithyia Eukoline as Kourotrophos." He describes them as follows: "Die zwei kleineren kauern am Boden in den für die Kinder im Alterthume so beliebten Motiven; die zwei andern stehen, die eine mit einem Kaninchen, die andere mit einer Taube auf dem linken Arme. Alle vier sind in krauswolligen, langen Chiton gekleidet. Die Arbeit ist verschieden, doch nirgends älter als etwa drittes Jahrhundert." In Olympia a statue of the Roman period was found representing a boy clothed in the toga. He is playing with a goose. This is presumably a votive offering to Eileithyia Olympia conceived as a fosterer of children (see above, page 26). When figures of playing children are found such as those,

⁷² Berlin Antiquarium, inv. nos. 7193-95 found at Curti. In the Dresden Museum (*Archäologischer Anzeiger*, 1889, p. 163) are examples of such infants found presumably in Palestrina and Nemi. Babies in cradles found at Curti: Berlin Antiquarium, inv. nos. 7196, 7198 sqq.; British Museum, Room of Terra-cottas, C47. How easily such representations could be turned into genre scenes is shown by one of the Berlin terra-cottas from Curti no. 7199, a winged Eros in a cradle. And yet we must include even this in the votive offerings to a goddess of childbirth. A mother's fondness for her child could easily lead her to compare it with Eros.

⁷⁸ From Thebes: Marx, in Mittheil. d. arch. Inst. in Athen, X. pp. 81 sqq. with pl. IV. figs. 1 and 2; Miss Harrison, Mythology and Monuments of Ancient Athens, p. 154 fig. 32. From Olympia: Marx, l. c. p. 83. These were doubtless offerings to Eileithyia Olympia from her temple at that place. From Kyzikos: Gerhard, in Archäologische Zeitung, 1865, pl. CXCIX.

"See Furtwängler, in Mittheil, d. arch. Inst. in Athen, III. pp. 197 sq. Cp. v. Sybel, Skulpt. in Athen, 591-594.

for instance, in the gardens of Pompeii, which served as mere decorations or as fountain figures, then, of course, they belong to the class of genre sculptures. It is moreover quite possible that the types of such genre statuettes which served mere decorative purposes in Roman times may have been originally invented for religious purposes, and may have been offerings set up in the sanctuary of a goddess of childbirth and Kourotrophos.

That Eileithyia was regarded not only in Agrai, Olympia, and Thera as a tutelary goddess of children besides holding the office of goddess of delivery is clearly seen by the finds from her grottosanctuary on the island of Paros. There Dr. Rubensohn discovered a life-sized marble statue of a boy squatting on the ground, and along with it a miniature marble copy of the same statue, as well as a large number of similar figures in terra-cotta. The charming individuality of the above-mentioned statues of little girls found in Agrai is entirely lacking in the figures from The life-sized monument was a votive offering of wealthy parents, while the smaller example of the type and those in the cheaper material of terra-cotta were gifts of the poor. Terra-cottas of this style, representing little boys either with or without the pointed cap, but otherwise entirely naked, have come to light in all parts of the Greek world. They always squat in the same stereotyped fashion. The left leg touching the ground in its entire length is bent at the knee, so that the heel is close to the body; but instead of drawing the right foot inward in the manner of the Turk, the leg is raised and bent at the knee, so that only the sole of the foot touches the ground. The right hand rests listlessly on the knee and the left supports the body. To Of course small variations occur, especially when the boy is playing with

The See Salzmann, Nécropole de Camiros, pl. 21. In the Berlin Antiquarium (inv. no. 7218) is a terra-cotta squatting boy holding a dove in his right hand. It was found at Curti. No. 7219 is similar, but the child holds nothing in his hand. A whole nest of these figures must have been found at Thebes, where almost every peasant offers them for sale. One of these is in the Art Museum at Cincinnati. Perhaps the terra-cotta groups of twins,

some pet animal or toy. The type was invented in the first half of the fifth century B. C., and held its own down to the end of the Graeco-Roman period. Little girls in this conventional type are unknown to me.

More difficult of explanation are the masks of a female deity, found occasionally in graves, but more frequently in the sacred precincts of divinities of childbirth and of healing. It is important to note that masks of this sort—that they represent a goddess and not a human being can be determined by the head-dressoccur from the sixth century B. C. down to perhaps the second century A. D. in the Eileithyia-grotto on Paros. I am deeply indebted to my friend Dr. Rubensohn for his kind permission to make use of his material, even though he has not yet published the results of his Parian excavations. It is safe to infer that the masks found in such abundance in Eileithyia's sanctuary represent that very goddess and no other. One might think, at first blush, that they were votive offerings of the poor, meant to take the place of dedicatory copies of the cult-statue made by the rich. But then, why did people in meagre circumstances not prefer to buy terra-cotta reproductions of the cult-statue which would no doubt have been quite as cheap if not cheaper than these masks? I believe that there was a kind of mask-cult, if I may use the expression, carried on in connection with Eileithyia at Paros. We shall return to this point presently. Masks of the type we are now considering have been found in Italy, being especially common in Curti, in Palestrina in the precinct of a Kourotrophos, in the Asklepios sanctuary on the Tiber Island at Rome⁷⁰ and in the Diana sanctuary at Nemi." They are represented in

mentioned above, were dedicated in the same sanctuary from which the squatting boys came. For examples of the type found on Cyprus, see Cesnola, Cypern, pl. XXXII. 4, p. 283 and pl. LXXIII. 3.

⁷⁶ See Dressel, in *Archäologischer Anzeiger*, 1889, p. 163. The masks from Curti are in the Berlin Antiquarium.

[&]quot;See Rossbach, 'Das Diana-Heiligtum in Nemi,' in the Verhandlungen der 40. Versammlung Deutscher Philologen und Schulmänner in Görlitz

the latter place either as a small mask from the forehead to the mouth, or as a full face mask, the head being decorated with a crown of flowers or of leaves. Occasionally profile views of a veiled head are found, but they may have served a different purpose, as did, for instance, the masks of Dionysos. The type of mask to which I would like to call especial attention differs from those of human beings in that they are decorated with veils, diadems or wreaths. To this class belongs the type which is modelled in bust shape (protome) representing a nourishing goddess who holds or presses her breasts, such as the terra-cotta example found in Boeotia, to which we have already had occasion to recur. Indeed, I hold that the prosopa-type grew out of the type of the protome. Good examples of the former type are the two female masks of the archaic period found by Dr. Boehlau on Samos. To It does not follow, however, that because the childnourishing goddess to whom the Parian masks were dedicated was identified on that island with Eileithyia, the same identification need necessarily hold true for Samos. In other words, we cannot use these masks on Samos to prove that Eileithyia was worshipped there as Kourotrophos. Their Kourotrophos may have been some other goddess. But right here a word of warning will not be out of place. We must not confuse these terra-cottas with a similar type of mask which was offered under entirely different circumstances. I refer to the ex votos to deities of healing presented by persons in order that they might be or because they had been cured of some disease of the face. When faces were offered for these purposes, they were never represented with the

(Leipzig, 1890), Sonderabdruck, p. 14, cp. id., in Bull. dell' Inst. 1885, pp. 153 sqq.; see also Stieda, in Mitth. d. arch. Inst. Röm. Abt. XIV. 1899, pp. 235 sq., who studied them from a physician's point of view.

⁷⁸ It is illustrated in Milani, Studi e Materiali di Archeologia e Numismatica, I. 1899, p. 157 fig. 149.

⁷⁰ Boehlau, Aus ionischen und italischen Nekropolen, p. 159 with pl. XIII. fig. 7; cp. the mask from Megara Hyblaia: Mon. Antichi, I. pl. 9 no. 15 and the illustration in the text, p. 839.

slightest trace of the divine element so characteristic of the masks of deities of childbirth. The human faces found in sanctuaries of healing are without veil, crown or diadem.⁸⁰

If I am right in tracing a connection between the Boeotian protome and the early deities of generation and nutrition, who are also represented in art as holding or pressing their breasts, then it would follow that the masks found in the Eileithyia-sanctuary at Paros were dedicated to her as a deity not only of delivery, but also of nutrition. Mothers who were desirous of ensuring the continuance of their nutritive powers would find the mask a suitable present for the goddess of nutrition.

As to the literary evidence concerning a mask-cult our sources are very scanty. I believe that Pausanias (VIII. 15, 1-3) refers to a religious ceremony which bears on the question in hand, when he speaks of the chthonic Demeter Kidaria (from kidaris turban) in Pheneos, Arkadia. For, on the Petroma, a most sacred and primitive baetylic monument to Demeter, which consisted of two large stones, there was a receptacle which contained a mask of Demeter Kidaria. At the Greater Mysteries the priest wore this Demetermask and smote the underground demons with rods. Now, since Demeter is associated with underground demons in this ceremony, the whole performance may have taken place to ensure agrarian and human fertility. That Demeter and Kore were elsewhere presented with masks is evinced by an inscription found

⁸⁰ A healed face on a marble slab, dedicated to Zeus Hypsistos on the Pnyx, Athens, in his capacity of a god of healing: Ancient Marbles in Br. Mus. IX. pl. 41 fig. 7. For a similar marble ex voto which had been set in a pillar of lime-stone along with other members of the body cured by Asklepios at Athens, see v. Sybel, no. 2870. It bore the inscription cited in the C. I. A. II. 3, 1453. Masks of this sort in silver and gold are mentioned in the inventories of reliefs of various members of the human body which had been melted down: C. I. A. II. 2, 766, ¹⁰, ⁶⁹, ¹¹⁰, etc. C. I. A. II. 2, 835, ¹⁰, ¹⁷, ³⁸, etc. C. I. A. II. 2, 836, ³¹, ³⁹, ⁴⁵, etc. Similar dedication to Amphiaraos, the god of healing at Oropos: I. G. S. I. 303 ⁶⁸. Cp. also Cesnola, Cyprus, chap. V. pp. 157-8.

at Aigai, Aiolis, which reports that gilded silver masks were to be dedicated to them by three girls, whose names are given. Whether the masks dedicated to Eileithyia in her sanctuary at Paros, to a Kourotrophos in Samos and in Italy, were in any way connected with a cult similar to that of Pheneos and Aigai cannot be proved at the present state of our knowledge. I would at least like to raise the question, and hope that the ex votos in the shape of masks may soon be less puzzling to us.

The Boeotian protome of a goddess pressing her breasts leads us to the discussion of still another kind of votive offering, which represents not the breasts of the goddess, but those of the mother herself. As a rule they are, no doubt, thank offerings for the nutrition which Eileithyia and other deities of childbirth caused to flow from the mother's breast. Wealthy mothers dedicated gold and silver imitations of their breasts, the poorer class had to be satisfied with marble reliefs of the same subject. It is not surprising that votive reliefs of the more precious material have not come down to us, for, as the temple inventories prove, they were melted into bullion by order of the temple authorities even in ancient times. But of the votive reliefs of female breasts in marble, a large num-

as See Bohn-Schuchhardt, in Jahrb. d. arch. Instituts, Ergänzungsheft, II. pp. 41 sqq. 'A[ρ]ι[σ]τόδικα διὰ Φένεος | ['Αρ]ι[στ]όδικα διὰ 'Αξί[ω] | [. . ια δ]ιὰ Λύκω ἐπαγγελ[λά[μεν]α[ι] σκευάσην ἄργν|ρα πρόσωπα ἔξ, κ[α]ὶ χρυσώ|σην καὶ θήσην τᾶς τε | [Δ]ώ[μ]ατρος καὶ τᾶς Κό[ρρ]ας καὶ τῶν συνναύων | [θ]έων etc. See also Bloch, in Roscher's Lexikon, II. 1, p. 1304. The mask of Artemis at Chios, a work of Boupalos and Athenis (Pliny, Nat. hist. 36, 13) does not bear on this subject. Equally foreign are the masks used for apotropaic purposes. For the custom of beating the earth with rods, see Mannhardt, Wald- und Feldkulte, I. p. 283 and Frazer, Commentary on Paus. VIII. 15. 3. See also Miss Harrison, in Journal of Hellenic Studies, XX. 1900, pp. 106 sq.

⁶² C. I. A. II. 1, 403 speaks of a silver oinochoe made for the Heros Iatros from the bullion of such votive offerings. C. I. A. II. 2, 836 reports that from the melted reliefs a votive offering should be made for Asklepios. From I. G. S. I. 303 we hear that even coins, besides all sorts of members of the human body and old silverware, were melted down to make a new sacrificial cup for Amphiaraos.

ber were found in the precincts sacred to deities both of child-birth and of healing. From their inscriptions we learn that women dedicated their breasts not only to Eileithyia, but also to other divinities, namely, Zeus Hypsistos, Asklepios, Amphiaraos, Aphrodite, Artemis Kolainis, Artemis Anaïtis and Men Tiamou, Demeter and Kore. Since the material on this subject is very much scattered, it may be well to collect it and put it into accessible form in this place.

From the Eileithyia-grotto on the island of Paros came two votive reliefs with female breasts, which I saw in the house of Dr. Roussos, a resident of Paroikia, Paros. This grotto had consequently been pillaged by the Greeks before Dr. Rubensohn made his excavations there. The smaller of these two votive offerings is without an inscription. It is a tablet of Parian marble, 4\frac{3}{4} inches long, 3 inches broad and I\frac{1}{4} inches thick. The breasts themselves swell \frac{3}{4} of an inch above the surface. The larger votive offering, now broken in two pieces between the breasts, is also a tablet of Parian marble, Io\frac{1}{2} inches long, 6 inches broad and I inch thick. The height of the breasts is I\frac{3}{4} inches. This relief was unquestionably fastened to the wall of the Eileithyia-cave, for it has two nailholes. Over the breasts is written an inscription in Greek letters of the Roman period, clearly legible, as follows:

'Επικράτηα Είλευ θύα εὐχήν.⁸³

It need not surprise us to find that women dedicated their breasts to male divinities, for they too were at times worshipped as deities of childbirth. Male demons performed the services of

gives a slightly different reading, in that he omits the *iota* after the E in Eileuthya. On a squeeze of this inscription in my possession the *iota* is quite plain though small. It seems to have been omitted in the first writing, but inserted later, when the sculptor noticed his mistake. Cp. A. Wilhelm, *ib.* XXIV. 1899, p. 346. On my second visit to Paros this monument was no longer in the possession of Dr. Roussos, nor do I know what has become of it.

midwives in the group found near Sparta (see above, page 43). and Zeus Hypsistos is, as we learn from the offerings made to him on the Pnyx hill at Athens, not only a god of healing, but also of childbirth, in the secondary sense of the term. But not only in Athens was he considered as such, for we have abundant evidence that elsewhere the same cult prevailed. On the highly archaic inscriptions cut in the rock at Thera, the name of Zeus is not lacking in the list of childbirth-divinities, as we have seen above (page 35, note 47). Nor can there be any doubt that Krinagoras (Anthol. Palat. VI. 244) regarded Zeus along with his consort Hera Teleia as a deity of childbirth. Furthermore, is it not weighty proof that Zeus is rightly included in this list since he was called Lecheates (Pausanias, VIII. 26, 6) in the Arcadian town Aliphera?—The members of the human body dedicated to Zeus Hypsistos on the Pnyx hill, which stamp him as a god of birth and of healing, belong without exception to the Roman period. That may, however, be due to mere chance. These anathemata were originally set in niches cut into the scarped rock beside the bema, but are now in the British Museum, having been discovered and carried away by Lord Aberdeen. According to the inscriptions three of the reliefs from these niches—each one represents one female breast—were vowed to Zeus Hypsistos as εὐχαί.84 In the Berlin Museum (Beschreibung der Skulpturen, nos. 718, 719) are two similar reliefs, with only one breast modelled on each. One of these is also dedicated to Hypsistos. They were found on the north slope of the Akropolis, but may have been dragged thither from the Pnyx hill as building material, although this is not very probable. Zeus may just as well have had another shrine somewhere on the north or west slope of the Akropolis. We have, likewise in a very late period, traces of Theos Hypsistos as a god of childbirth in Golgoi on Cyprus, as is evinced by a lime-stone votive offering in the shape of a pair of breasts dedicated to that god.

⁸⁴ Ancient Marbles in Br. Mus. IX. pp 185 sqq. with pl. 41 figs. 1-3 and C. I. A. III. 1, 153-155.

This tablet too has nail-holes for suspension. Two other examples of this type, but without inscriptions, were found in the same temple precinct, and are now in the Metropolitan Museum of Art, New York. 55 On one of these there is sculptured a bunch of grapes under the breasts, symbolic of fruitfulness. The possibility is not excluded that these offerings were made to the Supreme Zeus out of thankfulness for a cure of some disease of the breast, such as inflammation of the nipple, mentioned by Artemidoros (Oncirokritika, IV. 22), or a tumor on the breast, mentioned by Herodotos (III. 133 sq.). For along with women's breasts, also a face, arms, feet, and imitations of other parts of the human body, which had been or were expected to be healed, were found on the Pnyx hill. But then, it must be remembered that diseases of the breasts are so often connected with childbirth that we are justified in mentioning even such votive breasts in this place. Zeus, the tutelary divinity of the family, gave offspring in marriage, watched over women with child, and was invoked, as we have seen, along with Hera Teleia by women in travail. What was more natural than that he should be able to control the flow of milk and care for the nutrition of children in general?

In addition to the manifold functions of the great physiciangod, the Epidaurian Asklepios, he is also concerned with the actual processes of birth. He not only facilitates the birth itself, but also has control over woman's fruitfulness in marriage, and over her nutritive powers. He can send or prevent childlessness. We have evidence for all these statements from the invocations found in literature and in inscriptions. He is appealed to, and not in vain, by persons afflicted with the most wonderful diseases, and makes cures which excite the envy of the most distinguished physicians of our day. The inscriptions relating to

⁸⁵ See Perdrizet, in Bulletin de Corr. Hellénique, 1896, p. 361 no. 1; Cesnola, Cyprus, chapt. v. p. 158; and also The Stone Sculptures of the Cesnola Collection of Cypriote Antiquities in the Metropolitan Museum, Hand-book No. 3, p. 33 no. 422; p. 88 no. 1402.

wonder-cures by Asklepios in his sanctuary at Epidauros—they belong to the fourth century B. C., but are compiled from older material—deserve to be more widely known. They not only throw light on the kinds of diseases known to the ancient Greeks, but also give us much valuable information as to their methods of healing. Of course, these inscriptions must be used with the greatest care and discrimination, but it does not seem possible, to take one example of the many, to invent a story concerning the Cæsarean operation (Pliny, Nat. hist. VII. 9) unless it had in reality been attempted.86 Votive breasts, to be sure, were by chance not found in the Epidaurian hieron, although they were discovered at Athens not only in the Asklepieion, but also in the sanctuary of Amynos on the west slope of the Akropolis. The oldest dedication of this sort made to Asklepios in Athens belongs to about the end of the fourth century B. C. (C. I. A. II. 3, 1482). In all, we have knowledge of about twenty votive breasts of women from this sanctuary.87 Also from the Asklepieion at Eleusis, the exact site of which is

86 With Asklepios's aid Kleo, who had been pregnant five years, gave birth to a boy who immediately after birth was able to walk, according to one of the inscriptions of wonder-cures published by Cavvadias, Fouilles d' Épidaure, p. 24 no. 1 lines 3-9. Likewise, Isthmonike pregnant three years gave birth to a daughter (op. cit. lines 10-23). Intensely interesting and instructive for obstetricians and the history of medicine is the story of Sostrate (op. cit. p. 29 no. 2 lines 26-35) because it deals with pseudocyesis and the Cæsarean section on living women. Valuable material on this subject is given in Ploss, Das Weib, I. p. 491; id., II. p. 299. For Asklepios's power to cure sterility, see the story about Andromache, who presented her husband with a son, after Asklepios had merely touched her naked body. This is a most instructive example of the healing hand of the god (Cavvadias, op. cit. p. 30 no. 2 lines 60-63). How much charlatanry was connected with these cures is clearly seen from the stories which hardly bear translation (Cavvadias, op. cit. p. 31 lines 116-119; 129-132). For general information on this subject see Gardner, New Chapters in Greek History, pp. 370 sqq.

87 A tablet dedicated to Asklepios, representing a breast in relief: C. I. A. III. 1, add. 132k. From the Amyneion at Athens, but dedicated to Asklepios, came a similar offering: Koerte, in Mitth. d. arch. Inst. in Athen, XVIII. 1893, p. 241 sq. fig 3—C. I. A. IV. 2, 1511c. The votive tablet with a female breast (v. Sybel, 2997 (E 2751)) bearing the inscription ιγια ην ἀνέ-

In the temenos of healing sacred to Amphiaraos at Oropos votive breasts were not found, although we have knowledge of such dedications in gold or silver from an inventory of the treasury of the Amphiaraeion, which belongs to the third century B. C. (I. G. S. I. 303 lines 69, 71). It is equally true of these votive offerings that they may have been dedicated to Amphiaraos on account of some other sickness than that connected with child-birth.

As regards Artemis, however, we are on firm ground again. Even in the earliest period she played a most important part as protectress of women with child. In fact the affinity between Artemis and Eileithyia is so strong that their symbols and features are often not to be distinguished, and the same epithets are frequently common to both. Along with Hera, Artemis may lay greatest claim to being a primary goddess of childbirth, and who knows but that she served this function long before Eileithyia became recognized as the goddess of childbirth par excel-

θηκε 'Ασκληπιφ̂ was found in the Asklepieion. In the magazine of the National Museum at Athens I found the following breast-reliefs, doubtless from the Asklepieion: (1) without inscription E 1160; (2) with slight traces of an inscription, but illegible, no number; (3) E 2833 (v. Sybel, 3013); (4) E 2788 (v. Sybel, 2995) with traces of letters above and below the breast; (5) without number, without inscription; (6) E 2759 (v. Sybel, 3015) with archaistic inscription 'Εκάλης ἀνάθεμα; (7) E 1522 (v. Sybel, 2710); (8) E 2843 (v. Sybel, 2996). The others cited by v. Sybel, nos. 941, 1101, 1154, 1701 are presumably weights. The Asklepieion-inventory makes mention of similar anathemata: C. I. A. II. 2, 836 lines 21, 37, 42, 70, 78, 95. Of the three votive tablets, without inscriptions, representing breasts of women, which are now in the Museum at Leyden (Archäologischer Anzeiger, 1849, p. 83) two (nos. 148. 149) came from Melos, the third (no. 525) from the Asklepieion at Athens, as Dr. Holwerda kindly informs me.

lence. We may therefore infer with certainty that when votive breasts were offered her, it was most frequently done after the birth of a healthy child, so as to prevent deficient lactation. Dr. A. Wilhelm called my attention to a very interesting relief of the class with which we are now concerned, dedicated to Artemis Kolenis. Since it is here published for the first time, it may be of interest to give the dimensions. On a marble tablet 8½ inches long, 8½ inches broad, 1¼ inches thick, the upper right and lower left corner of which is broken off, a single breast is represented in high relief. It is in the possession of the wife of Dr. Patrikios of Athens, but was found presumably on their country-seat in the neighborhood of Eretria, Euboia. Under the breast is a Greek inscription dating from the Roman period:

Καλλιστράτη | 'Αρτέμιδι Κολενίδι ἐπηκόω | εὐχήν.

Kolainis or Kolenis, an epithet of Artemis, is not yet satisfactorily explained, though it probably has something to do with childbirth. In this inscription she is very appropriately called Epekoos, because she listens to the prayers of women in travail. In Lydia, though not before the third century A. D. to be sure, we find Artemis Anaïtis coupled with Men Tiamou playing the part not only of a maternal goddess of healing and of childbirth, but also of guardian over the fertility of cattle. We gather this

88 On Artemis Kolainis, see Preller-Robert, Griech. Mythologie,* I. p. 311 note 4. In addition to the material cited by Robert we have (1) a decree (C. I. A. II. 1, 575) found in the township Myrrhinus (Merenda) which was set up in the sanctuary of Artemis Kolainis (Mitth. d. arch. Inst. in Athen, XII. 1887, p. 278 no. 150); (2) presumably from the same sanctuary, a small four-cornered altar dedicated to Artemis Kolainis (ib. pp. 277 sq. no. 149); (3) from the same place, an altar also dedicated to Kolainis (ib. pp. 282 sq. no. 180). The letters of the inscriptions on these two altars have precisely the same shape as those on the relief in the possession of Mrs. Patrikios, and belong consequently to the same period. The only difference is in the spelling of the word, Kolainis on the altars and Kolenis on the relief representing the breast. For Artemis Epekoos, see Preller-Robert, Griech. Mythologie, I. p. 320.

from a votive relief found in Gjölde, now in the Museum at Leyden. I find that the proportions of this monument are nowhere given, wherefore it seems important to note them here. The stele, which is crowned with a gable-shaped ornament, measures 2 feet II inches in height, I foot 5 inches in breadth (below), and I foot $2\frac{1}{2}$ inches in breadth (above). On it are sculptured in high relief two breasts of a woman, and a human leg; to the right of these are two human eyes, merely incised in the stone. The stele stood on a base, for below is a peg for insertion in a socket. Beneath the objects depicted is the following inscription: 89

Θεὰ 'Ανάειτι καὶ Μηνὶ Τιάμου Τύχη καὶ Σωκράτης καὶ 'Αμμιανὸς καὶ Τρόφιμος οἱ 'Αμμίου καὶ Φιλήτη καὶ Σωκράτια αἱ 'Αμμιάδος ποήσαντες τὸ ἱεροπόημα εἰλασάμενυ Μητέραν 'Ανάειτιν ὑπὲρ τέκνων καὶ θρεμμάτων ἔνγραφον ἔστησαν. "Ετους τκά μη(νὸς) Ξανδικοῦ.

Aphrodite as the goddess of marriage is at the same time goddess of childbirth and fosterer of children. At the Attic Thesmophoria, a birth-feast, Aphrodite Kolias was probably worshipped along with the Genetyllides, divinities of midwifery. Be that as it may, it is certain that Aphrodite under the title of Kolias was regarded as a goddess of childbirth in the Pera-grotto on Mt. Hymettos, whither pregnant women went to drink the water of the sacred spring, so as to procure easy delivery. Barren women too were accustomed to drink from the spring in the

⁸⁰ I am indebted to Dr. Holwerda for a drawing of this stele and a squeeze of the inscription. The measurements are my own. The inscription has been frequently discussed: Μουσεῖον καὶ Βιβλιοθήκη τῆς Εὐαγγελικῆς Σχολῆς (Smyrna), 1884-5, p. 54, no. υλγ΄; S. Reinach, Chroniques d' Orient, 1886, I. p. 156; Perdrizet, in Bulletin de Corr. Hellénique, 1896, p. 58; Drexler, in Roscher's Lexikon, II. 2, p. 2703 no. 16. The tablet with two breasts (Museion, 1878-80 p. 165 no. τ λδ΄) does not belong here.

¹⁰ See Preller-Robert, Griech. Myth. I. pp. 779 sq. and 377 sq.

Pera-grotto in hopes of becoming fruitful." Additional literary evidence might be given that Aphrodite concerned herself with the birth and rearing of children, but it is not necessary to go into detail. Suffice it to say that we also have archaeological evidence on this subject; for Aphrodite was not forgotten after the successful delivery of an Athenian woman, who dedicated her breasts to the goddess, according to the inscription on a votive tablet (C. I. A. III. I, add. 130 a) of this sort.

It is quite apparent that mothers and children stood under the special protection of agrarian divinities, and that therefore Demeter was held to be a Kourotrophos. As such she and her daughter Kore received votive offerings in the shape of female breasts, in their sacred precinct at Knidos. Sometimes offerings of a like nature were made to Kore alone. Adjoining the Konak of the Turkish governor of Smyrna, in the garden of the School Idadié, I saw a marble tablet (labeled no. 130, 7½ inches long, 6¾ inches high, and ¼ of an inch thick) representing two breasts of a certain woman Tatias, dedicated as a votive offering to Kore, according to the inscription which is here published for the first time, as far as I know:

Τατιάς Κούρη εὐχὴν ἀνέθηκεν.93

⁹¹ Concerning Aphrodite as a goddess of agriculture, see Crusius, Beiträge zur griech. Mythologie und Religionsgeschichte (Abhandlung zu dem Jahresbericht der Thomasschule in Leipzig für das Schuljahr 1885-6), pp. 17 sq. Concerning the spring in the Pera-grotto: Photios, Lex., 185. 21, Κυλλοῦ πήραν.

⁹² See Newton, Halicarnassus, Cnidus and Branchidae, II. 2, pp. 387 and 804 sqq, where they are explained as weights. Nevertheless. I believe they are breast-dedications and not weights, for it would be difficult to explain the use of weights in a temenos. Judging from the illustrations (Newton, op. cit. I. pl. 58), fig. 9 is certainly a votive offering of the sort under discussion. Cp. Homolle, under "Donarium" in Daremberg et Saglio, Dictionnaire des antiquités, II. p. 375.

⁰⁸ For Tatias (a 'Lallname') see P. Kretschmer, Einleitung in die Geschichte der Griechischen Sprache, p. 349. The same form of the name is found in a Lydian inscription from Gjölde (Drexler, in Roscher's Lexikon, II. 2, p. 2704).

Before leaving the subject of dedicated breasts, it is necessary to call attention to a similar kind of offering, representing an arm and breast clasped by a hand. An example of this type was found in Naukratis, dedicated no doubt to Aphrodite. Mr. Gutch[™] has given the correct interpretation when he calls them "votive offerings made by mothers to ensure the continuance of their nutritive powers." They remind us of the Boeotian protome mentioned above (see pages 3 and 53). In this connection Mr. Gutch writes: "Four objects of a like nature are figured, two for the first time, in Professor Ridgeway's new book on the Early Age of Greece. They consist of 'a necklace of gold and cornelian beads, with pendants which consist alternately of glass paste and gold plate in the form of a hand grasping a woman's breast, from which hangs a small acorn formed of an olive-green stone in a gold cup,' from Aegina; a gold relief from Rhodes representing a woman with her hands held to her breasts; and two other similar gold reliefs of unknown provenance. They are no doubt intended for personal wear as milk-charms."

The Greeks considered not only the mother's breasts a suitable present to the deities of childbirth, but also the private parts. In this manner I, at least, am inclined to explain the votive offerings representing *vulvae*, *uteri*, and *ovaria*. Marble and terracotta vulvae were dedicated in Greece and Italy in almost all the sanctuaries of healing and of childbirth. But up to the present, as far as I know, no dedicated uteri were found in Greece, though they are quite common in Italy. The material of which they were made is in all cases terra-cotta. The male organ of generation

⁹⁴ British School Annual, V. (1898-9) p. 83.

ps Stieda, in the Mitth. d. arch. Inst. Röm. Abt., 1899, p. 241 treats of these organs, but leaves the "so-called uteri" unexplained. Examples of these terra-cotta wombs can be seen in the Munich collection of terra-cottas and in the Berlin Antiquarium, but especially in the Museums of Italy. Uteri from the Nemi-Artemision are illustrated in Archaeologia, vol. L. pl. VIII. (London, 1887). Cp. also Biardot, Terres Cuites Grecques Funebres (Paris, 1872). pl. VI.; and Ploss, Das Weib, I. p. 172 fig. 46.

was also offered for offspring, especially in connection with the Arrhephoria or Arrhetophoria. It would be a tedious, unsatisfactory, and vain undertaking to cite all the consecrated phalloi here, for it is evident that in many cases they were offered for entirely different purposes from that of obtaining human fertility. Let me only mention in passing that Theos Hypsistos in Golgoi, Cyprus, to whom the female votaries presented breasts, as we have seen above, was also the recipient of the male organ of generation (Perdrizet, in Bulletin Corr. Hellén. 1896, p. 362), and that similar votive offerings were found in the Asklepieion at Athens (v. Sybel, 2705 sq., 4058 etc.). Since Asklepios also received marble tablets in the shape of vulvae, precisely like those offered to Aphrodite in her sanctuary at Daphne because of child-lessness in marriage, I am inclined to explain in the same manner the ex votos of genitals offered by men.

Also to Zeus Hypsistos on the Pnyx hill the women consecrated their hebai = vulvae besides their breasts (C. I. A. III. 1, 150). This strengthens our supposition that the supreme god was worshipped at this place not only as a god of healing, but also of childbirth and fertility in marriage. The anathemata of this sort in Italy are mostly of terra-cotta, as, for instance, the example

⁸⁶ See Mommsen, Feste der Stadt Athen, p. 510; Preller-Robert, Griech. Myth. A. I. p. 781 note 1. Cp. above, pp. 17 sq. and 48.

no. 3690. Cp. the votive offerings mentioned in the Asklepieion-inventory C. I. A. II. 2, 836 lines 39, 49, 100 and 109. The vulvae from the grotto of Aphrodite near Daphne on the Sacred Way were originally inserted in niches cut in the walls of the cave. They were offered to Aphrodite as goddess of childbirth and fertility. Recall how Aigeus because of his childlessness introduced Aphrodite Ourania into Athens (Pausanias, I. 14, 6). The site of this sanctuary leads to the suggestion that Aphrodite as birth-goddess played a part in the Greater Eleusinian festival. like Aphrodite Kolias in connection with the Thesmophoria. The inscriptions belonging to these hebai are in some cases on the reliefs themselves, in others below the niches incised in the rock. See C. I. A. II. 3, 1556 sq., 1569; IV. 2, 1558 b-n; III. 2, 3823. For general information on this sanctuary of Aphrodite, see Frazer's Commentary on Pausanias's Description of

in the Berlin Antiquarium (T. C. 3241) from Curti. For whom this offering was intended is not known. The three vulvae from the Artemision at Nemi were without doubt dedicated to Diana, because she was recognized there as a birth-goddess.**

That our interpretation of these votive gifts is correct, is supported by the evidence gained from an inscription found at Delos, which makes mention of such offerings to the Delian Eileithyia in the following terms: ἐν τῶι Εἰλειθνιαίωι . . . ἐρωτίωγ καὶ βουβαλίων ζεῦγος πρὸς ξύλωι, Θεσσαλίας ἀνάθημα (see above, page 33).

From the epigrams in the Anthology we learn that mothers dedicated their garments, their girdles, the ornaments taken from their hair and sometimes even their locks, usually after the birth of a child, in fulfillment of a vow. It is permissible to make use of these epigrams for our purpose of determining the different kinds of votive offerings suitable to deities of childbirth, even though they were not in reality offered; because they are nevertheless based on actual occurrences and consequently give us an insight into the habits and customs of their day. The custom of dedicating a robe to Artemis Brauronia on the Athenian Akropolis, after successful delivery, is well-known through the administration-reports of her temple, dating from the middle of the fourth century B. C. (C. I. A. II. 2, 751, 754-764). According to Euripides (Iph. Taur. 1462 sqq.) offerings of women's robes were made to Iphigeneia in Brauron, in behalf of those who had died in child-bed. Iphigeneia was therefore regarded as a goddess of childbirth at Brauron. In that aspect we have already met her in

Greece, II. pp. 497 sqq.; Mommsen, Feste der Stadt Athen, p. 228 note 2. In a rock-grotto of Aphrodite near Tyre vulvae are incised on the wall: Corp. Insc. Semit. pl. III. 6 and pp. 27 sq. See also Richter, Kypros, Bibel und Homer, pp. 150 sq., figs. 145-148. One of the inscriptions mentions Ptolemaios and Aphrodite Epekoos. In Naupaktos too we find a cult of Aphrodite as goddess of childbirth and marriage: Paus. X. 38, 12. Traces of this grotto have unfortunately not been found (Weil, in Mitth. d. arch. Inst. in Athen, IV. 1879, p. 23 note 1).

⁰⁸ See Rossbach, in Bull, dell' Inst. 1885 p. 153.

Argos (see above, page 22). After the birth of a healthy child the mother was accustomed to offer Artemis not only her robe, girdle, and locks, but also her sandals, breast-band, and head-dress. In one case we hear even of the proud father offering his sandals (Anthologia Palatina, VI. 201, 271, 277). Besides Artemis, her mother Leto was not forgotten on such occasions, for we read (Anthol. Palat. VI. 202, 272) that as a goddess of childbirth Leto received "a girdle with beautiful tassels," a garment and a breast-band. In the same collection of epigrams (Anthol. Palat. VI.274) we hear of a girl who invoked Eileithyia as πότνια, κουροσόος, δλβία Ειλείθνια, while dedicating to the goddess her robe and her stephane as offerings for deliverance (rhysia). After successful parturition Ambrosia deposited the ribbon of her hair (δέσμα κόμας) and her peplos at the feet of Eileithyia (Anth. Pal. VI. 200). Ampharete decorated the cult-statue of Eileithyia with her transparent veil, in expectation of an easy birth (Anth. Pal. VI. 270). Kallirrhoe dedicated to Aphrodite crowns, to Athena a lock of her hair, and to Artemis a girdle, after the birth of her first son (Anth. Pal. VI. 59).

Since, as is well known, the Greeks held birth to be unclean (Thuc. III. 104), it is only natural to suppose that the above-mentioned articles of dress were those worn just before the birth of the child. The act of loosening the girdle was symbolic of an easy delivery, and so it came to be a suitable gift for a goddess of childbirth. The offering of hair-fillets goes back presumably to a similar custom, for a woman in child-bed laid aside not only her girdle, but also her hair-bands, letting her hair flow loosely down her back. There was a superstition among the Greeks that if anything was tied or twisted during this period, the process of birth would be impeded. The epithet λυσίζωνος is therefore appropriately applied to both Artemis and Eileithyia.⁵⁰

⁸⁰ See Preller-Robert, Griech. Myth. I. p. 319; Farnell, The Cults of the Greek States, II. p. 444; Theokritos, 17, 60. Interesting comparisons are to be found in Ploss, Das Weib, II. pp. 245 sq. Cp. also the grave-

It is especially noteworthy that in the Anthology (Anth. Pal. VI. 201 and 59) human hair was among the things offered Artemis and Pallas Athena as goddesses of delivery. Generally hair offerings were not made after the birth of a child as a thank offering, but before the wedding, presumably as a propitiatory offering, for the sake of offspring. But in both cases the recipients of this sacrifice were goddesses of childbirth, with the only difference that in the case before us the dedicatory offering was made to a goddess of midwifery after having escaped the dangers of childbirth, whereas in the other case, the offering was made to some Kourotrophos or goddess of fertility in marriage, before the birth of a child, nay, even before the wedding. Such Kourotrophoi and marriage-goddesses are, as we have seen, liable to develop into real goddesses of childbirth and are closely related to Eileithyia. Indeed, the latter was also regarded as Kourotrophos, as has been made sufficiently apparent above. Regarding hairdedications there is some valuable information scattered throughout Greek literature, which may be well worth our while to collect and discuss at this point.

In honor of the Hyperborean virgins, Hyperoche and Laodike, Delian youths and maidens sacrificed locks of their hair just before marriage, as Herodotos (IV. 34) tells us. The maidens wrapped their locks around a spindle, the youths wrapped theirs around the first green shoot of some plant, not further designated. These were then deposited in the sanctuary of Artemis on the grave of the Hyperborean virgins. From this we learn that Hyperoche and Laodike stood in close relationship to Artemis in her cult at Delos. In addition to this it is noteworthy that Hyperoche and Laodike, like Eileithyia, were reported to have come from the

reliefs of women who had died in travail: Conze, Die attischen Grabreliefs, pl. 46, 74, 75 and p. 70 text-illustration. Of these, two have already loosened their girdle and only the first one's hair is done up; in the case of the others it hangs loosely down the back. Cp. Wolters, ${}^{\prime}E\phi\eta\mu$. ${}^{\prime}a\rho\chi$. X. 1892, p. 229 note 2.

realms of the Hyperboreans, the land of light. Now, because of the close affinity between these virgins and Eileithyia, we are justified in concluding that the locks of hair were offered them to ensure human fertility to the votaries, and that in this respect they are goddesses of childbirth. Their counterpart, Arge and Opis (Herodotos, IV. 35; Pausanias, I. 43, 4), are brought into direct relationship with Eileithyia in the legend, for they too came as virgins to Delos from the land of the Hyperboreans with propitiatory gifts to Eileithyia so as to procure a quick and easy birth. When we call to mind the evidence gained from the epigrams in the Anthology concerning hair offerings, and the additional proof that it was customary to offer locks of one's hair at Delos so as to prevent sterility, then we certainly have the right to conclude, when we read that maidens about to enter wedlock sacrificed a lock of their hair to Arge and Opis, that it was done for identically the same purpose.¹⁰⁰ Pausanias (I. 43, 4) informs us that it was the custom at Megara for maidens about to enter wedlock to make libations at the tomb of the virgin Iphinoë, daughter of Alkathoos, and at the same time to offer locks of their hair. We cannot say with certainty that Iphinoë was a goddess of marriage and childbirth, but the fact that Pausanias in the same passage reminds us of the Delian custom of offering locks in honor of Hekaerge and Opis makes it highly probable that the ritual was for the same purpose both in Delos and in Megara. Likewise in Athens was it customary for women, usually before marriage, to shear their hair in honor of Hera Teleia, Artemis, and the Moirai (Pollux, III. 38; Hesychius s. v. γάμων ἔθη) to prevent barrenness.

¹⁰⁰ Concerning Hyperoche and Laodike, Opis and Arge. see Crusius, in Roscher's *Lexikon*, I. 2 pp. 2811 sqq. 2835. He says very aptly: "Die 'Hyperboreeropfer' sollen wie zahlreiche verwandte agrarische Bräuche dem Menschen Ehesegen und Wachstum gewährleisten: jener echt griechischen Anschauung entsprechend, wonach dieselbe göttliche Kraft im Wachstum des Feldes wie des Volkes wirksam ist." On this point, see the first chapter of this paper. See also Farnell, *The Cults of the Greek States*, II. pp. 465 sq.

The hair of children was sacred to the river-gods as Kourotrophoi, in honor of whom it was allowed to grow (Usener, Götternamen, p. 125, note 10, and p. 353). Also in Thera were locks of hair offered to the Nymphs of the Dymanes, presumably out of gratitude for offspring or safety in childbirth (see above, page 35, note 47). In Titane (Paus. II. 11, 6) the cult-image of Hygieia was so entirely covered with the hair of women and with bands of Babylonian raiment, votive offerings of the women, that one could hardly see the statue. Since we have learned that the garments and the locks of women were suitable gifts to goddesses of childbirth, and since the dedicated breasts of women seem to indicate that Asklepios was not only a god of healing but also of nutrition, since, furthermore, we have absolute proof that Asklepios was concerned with the very processes of childbirth in Epidauros, we may be right in assuming that Hygieia received the above-mentioned gifts of robes and hair not because of her ability to heal, but because of her interest in matters that had to do with child-bearing and the rearing of children. On the other hand, I am inclined to believe that the offerings of hair to Asklepios and Hygieia in Paros (C. I. G. 2391 sqq.) were made to them as deities of healing. It happens not infrequently that one and the same kind of votive offering serves diverse purposes. This is especially true of the case in hand. For instance, from Artemidoros (Oneirokritika, I. 22) we learn that not only the sick, but also those who had suffered shipwreck cut their hair in honor of the god to whom they attributed their recovery or assistance.101 It is at times impossible to give the correct interpretation of votive offerings of locks of hair, because in addition to the various purposes just discussed,

¹⁰¹ See also Anthol. Palat. VI. 164. Concerning the practice of dedicating hair in the niches of the temple of Zeus Panamaros in Caria, see Deschamps and Cousin, in Bull. Corr. Hellén. XII. 1888, pp. 479 sqq. For additional material on hair-dedications, see Frazer in his Commentary on Pausanias's Description of Greece, III. pp. 279 sqq.

they are known to have had another significance. I refer to their being a substitute for human sacrifice.

From an inventory of the anathemata belonging to the Delian Eileithyiaion it is evident that the women, most likely after a successful delivery, dedicated, besides typoi—by which I understand reliefs of breasts and of other parts of the body-also most valuable jewelry to the goddess: golden rings with precious stones, bracelets, armlets, ear-rings, a golden heart, etc. Silver-plated apples—the apple being symbolic of fertility—and small gilded animals are also mentioned in the list (see above, page 33). The question may well be asked: What animals were liable to be dedicated to Eileithyia? In general we may suppose that Eileithyia would rejoice especially in such animals as could be interpreted as being symbolic of fruitfulness. The Thebans, for example, regarded the weasel as an animal sacred to the goddess of childbirth. It plays a most important part in the story of the birth of Herakles.102 According to Ailianos, the Egyptian Herakleopolitai revered the ichneumon, as an animal sacred to Leto and Eileithvia (see above, page 37). The pig is above all other animals a symbol of fertility, and for that very reason was preferred as a most suitable sacrifice for deities of childbirth. We have already seen that the pig plays a most conspicuous part in the celebration of the Thesmophoria, that a pregnant woman sacrificed a pig to Athena as goddess of fertility on the Akropolis at Athens, and that—if I interpret the statuette rightly—a young mother holding a baby in swaddling-clothes is about to sacrifice a pig to some deity of childbirth, in acknowledgment of her quick labors. In the temenos of Demeter and Kore at Halikarnassos an important terracotta was found. It represents a woman standing, the upper half of her body entirely nude, pressing a pig to her breast. Newton

¹⁰² Aelian. *Nat. anim.* XII. 5. Concerning Galinthis or Galinthias, the deified weasel, and midwives in general, see Welcker, *Kleine Schriften*, III. pp. 190 *sqq.*, 194.

was quite right in calling her Kore, and was able to point out similar representations. Demeter and Kore were doubtless regarded also as deities of childbirth at this sanctuary, and were worshipped as such, for another terra-cotta statuette, found in the same precinct, represents a Kourotrophos or mother nursing her child. Even the type of the squatting boy, with which we are now familiar as a proper dedication to child-nourishing deities, is not wanting in Demeter's sanctuary at Halikarnassos. 103 When we find Kore represented with a pig as an attribute, we must consider her a goddess of childbirth. But we have additional proof that Demeter and Kore in their precinct at Knidos were conceived as goddesses of birth and human fertility, for among the dedications, votive breasts, already mentioned, and marble pigs almost life-size were found. One of the latter was dedicated by a woman named Plathainis, wife of a certain Platon, to Kore.104 Beyond this, the inscription unfortunately gives us no information, but it seems certain, at least to me, that Plathainis made the offering either for offspring, or out of thankfulness for easy delivery. There is still another mode of dedicating pigs to deities of childbirth, as is seen in the terra-cotta imitations of this animal carrying a child on its back. The combination seems odd at first glance. for what is the meaning of a child riding or lying on a pig's back? The only satisfactory explanation is to be sought, as has just been intimated, in the circumstance that the pig is a symbol of human fertility. In quite the same manner must we explain the terra-cotta votive offering in the Museum at Karlsruhe, which represents a boy riding a cock. Where, however, the cock and the pig occur without the child—there are such ex votos in the Cincinnati Art Museum—it is doubtful for what purpose and to whom the dedica-

On Budrum (Halikarnassus, etc. I. pl. 47 figs. 4, 5; Text, II. 1 p. 328. On Budrum (Halikarnassos), Field of Chiaoux, a temenos of Demeter and Kore: l. c. pp. 330 sq. Squatting boy: pl. 60 fig. 11.

¹⁰⁴ Newton. *l. c.* pl. 58 figs. 2, 3; pl. 89 fig. 19. Text, II. 2, p. 385, (7) and (8).

tions were made, unless perchance they are found in sanctuaries of birth-deities. Hens were also appropriate gifts for divinities of childbirth. 105—In conclusion, before we leave the subject of votive offerings to take up the study of Eileithyia-representations on the vase-paintings and other monuments which have no bearing on her cult, it is necessary to say a few words about the tortoise, another animal pre-eminently sacred to Eileithyia and her associates. In Upper Bavaria and Tyrol, down to the present day, wax or iron tortoises are said to be dedicated to the Virgin Mary by barren women, because the uterus is often identified with a tortoise in popular parlance. Indeed, it is very remarkable what a striking resemblance there is between the above-mentioned terracotta ex votos representing uteri and the tortoises of the same material, now found everywhere in Greece. In this connection attention must be called to the formulae of Greek exorcisms in which the ὑστέρα is compared with all sorts of animals.106

It is hardly necessary to say that in this chapter we have not exhausted the types of votive offerings that might be made to

¹⁰⁵ The cock was especially sacred to Leto. It is a symbol of painless delivery and was thought to assist women in labor. Cp. Aelian, Nat. anim. IV. 29: πυνθάνομαι δέ ότι άρα καὶ τŷ Λητοῖ φίλον έστιν ὁ άλεκτρυών τὸ δρνεον. τὸ δὲ αἴτιον, παρέστη φασὶν αὐτŷ τὴν διπλῆν τε καὶ μακαρίαν ώδινα ώδινούση. ταῦτά τοι καὶ νῦν ταῖς τικτούσαις ἀλεκτρυὼν πάρεστι, καὶ δοκεῖ πως εὐώδινας ἀποφαίνειν. On Leto as a birth-goddess see Enmann, in Roscher's Lexikon, II. 2 pp. 1968 sqq. Cp. also Ploss, Das Weib, I. pp. 494 sqq. After the danger period connected with childbirth is safely passed, it is still customary in Greece to kill a cock (Wachsmuth, Das alte Griechenland im Neuen, p. 71 note 2). From a recently published inscription, found in the Asklepieion at Epidauros, we learn that hens were sacrificed to Leto and Artemis presumably as birth-goddesses. The inscription is published and discussed by Kabbadias. τὸ lερὸν τοῦ 'Ασκληπιοῦ ἐν Επιδαύρω, p. 186 note I; ib. p. 208 with note 2='Εφημερίε άρχαωλογική, 1899, pp. 5 sqq. But the cock, it must be remembered, was also sacrificed to deities of healing, see, for example, Herondas, IV. 12 sqq.

¹⁰⁶ For an iron tortoise symbolic of the womb, see Ploss, Das Weib,⁸ I. p. 171 fig. 45 (Museum at Wiesbaden); for a wax example of this type: *ib.* p. 444 fig. 92 (Salzburg). Concerning the ancient Greek formulæ of exorcisms, see Drexler, in *Philologus*, 1899, pp. 594 sqq.

deities of childbirth. It seemed nevertheless a necessary and worthy undertaking to call special attention to several types of this nature, for we were thus able to add some deities to the associates of Eileithyia whose functions along this line were up to the present not sufficiently well known.

CHAPTER IV

EILEITHYIA-REPRESENTATIONS IN ART

The literary investigation of the cult-images in the sanctuaries of Eileithyia, the study of the votive offerings and of the coins resulted, it is true, in giving us but a vague idea of the appearance of the goddess in her cult-statues. This much, however, may be said with certainty: Eileithyia was usually represented as standing and draped. Only in one locality, namely in Bura, could the possibility of an undraped form of the goddess be taken into consideration (see above, page 28). But it must be remembered that Pausanias was not permitted to see all the cult-images of the goddess of childbirth, for some were kept strictly secret, no one but the priestesses being allowed to lay eyes upon them, because of their extreme sacredness, as Pausanias himself leads us to conclude, in his description of the Eileithyia-sanctuary at Hermione. Might not the peculiarity of the representation of the image, perhaps its nakedness, or its kneeling position in the act of childbirth, have been the cause for secrecy? This seems more than probable, for a nude Eileithyia is far from being "an inconceivable representation," as Mr. Farnell would have us believe. The oldest cult-statues were naturally of wood, xoana, decorated with real raiment, costly ribbons, and finely woven veils, votive gifts for a speedy and easy birth. Even in later times, the images were made of wood, with only the visible, undraped parts, such as hands, feet, and face, of marble (Paus. VII. 23, 5). In Bura, however, and in Messene (Paus. VII. 25, 9; IV. 31, 9) the agalmata were entirely of stone. In both instances we are able to date these monuments as not earlier than the fourth century B. C. As regards the attributes of Eileithyia, we find that her emblem at

Aigion was the torch (Paus. VII. 23, 5), and that on the coins she sometimes holds the same attributes, one raised, the other lowered. By this position of the arms we are led to believe that the maker of the coins imagined the goddess alternately moving the torches up and down (see above, page 27), a sort of hocus-pocus gesture. And yet, on the only authentic copy of an image of Eileithyia the inscription proves the name—the goddess does not hold a torch, but a calycine flower in her right hand, whereas with her left she lifts her garment in a very every-day manner. The torch may have been emblematic of light and life, the light which scares away all evil spirits, and the flower was no doubt symbolic of fertility. In the vase-paintings the Eileithyiai are oftenest represented without attribute. Only twice, on black-figured vases (Mon. dell' Inst. VI. 56, 3 El. Cér. I. 57), do we find that one of the two Eileithyiai holds a wreath.107 Respecting the type of Eileithyia Eulinos at Delos and Kleitor, Pausanias (VIII. 21, 3) gives us no information as to whether or not her nature as a goddess of destiny was brought out by means of any characteristic attribute.

It will now be necessary, however, to make a more detailed study of those Eileithyia-representations which have no direct bearing on the cult, such as vase-paintings and decorative reliefs, but which throw light on the mythological conception of the goddess of childbirth. We have learned from the literary sources that Eileithyia is often represented in the plural. A sifting of the monumental sources bearing on this subject has led to the same results. With regard to the vase-illustrations of birth-scenes, it depends largely upon the given surface at the disposal of the vase-painter, whether he shall represent one, two or even three Eileithyiai. If he is decorating a small vase, and is cramped for room,

verath had medicinal properties. Schneider, 'Die Geburt der Athena,' in Abhandlungen des Arch. Epig. Seminars der Universität Wien (1880), I. p. 17 explains the wreath in a much simpler manner, as a present for Athena. It may have been a votive offering presented by Zeus, so as to have an easy delivery, or it may have been merely an emblem of fertility.

he must be satisfied with one Eileithyia. For the sake of symmetry, he is more apt to depict two100 rather than three. Indeed, there are only two examples, where three Eileithyiai occur in one and the same picture, 110 even though three midwives correspond more to real usage, for Soranos, a physician from Ephesos, tells us that three assistants must be present at every delivery, two at the sides, and a third behind the woman in labor, to prevent her from falling backward." We must not, therefore, imagine for one moment that a dualism of form was the preferred religious or mythological conception of the goddess Eileithyia, even though the monuments at first glance seem to warrant such a conclusion. Nor is the number of Eileithyiai fixed in any certain period or locality; it varies just as arbitrarily on the Attic black-figured ware as in the Homeric Epos. Only once, and that on a blackfigured kylix of Phrynos, 112 is Eileithyia altogether wanting at the birth of Athena. But then, in this vase-painting, we miss all the other divinities commonly assembled to watch the mysterious birth, except Hephaistos, who could not very well be omitted, because he plays too important a part in the process to be absent, for it is

108 One Eileithyia: Masner, Wiener Katalog 223; Gerhard, Vasenbilder, I. I; Museo Gregoriano, II. 39, 48 fig. 2b; Él Cér. I. 64, 65 (red-figured pelike)—Gerhard, Vasenb. I. 3, 4—Smith, Cat. of Vases in Br. Mus. III. p. 256, E 410.

Two Eileithyiai: e. g. Gerhard Vasenbilder, I. 2. 5; Él Cér. I. 61. 63 (Oltos kylix)=Cat. of Vases in Br. Mus. III. p. 50. cp. Hartwig, Meisterschalen, pp. 79, 233 note I. On Etruscan mirrors two Eileithyiai occur: e. g. Gerhard, Etruskische Spiegel, IV. I, 284 285; id., V. 6=Mon. dell' Inst. IX. 56, 3=Walters, Cat. of Bronzes in Br. Mus. p. 91 no. 617. For two Eileithyiai on a relief from Chalkedon representing the birth of Athena, see S. Reinach, in Revue des Études Grecques, 1901, pp. 127-137 (I pl.). (This reference is taken from the American Journal of Archaeology, V. 1901, p. 462, without my being in a position to verify it.)

110 Three Eileithyiai: Masner, Wiener Katalog, pl. IV. 237; Él Cér. I. 57.

¹¹¹ Soranos (Rose), p. 239, old Latin translation, p. 22. Cp. Wolters, in Εφημερις άρχαιολογική, 1892, p. 227 note 2.

¹¹² Él Cér. I. 56.

his special function to split open the head of Zeus with his ax, in order that the king of the gods may be delivered of Athena.

Professor von Schneider has made a careful study of the monuments which illustrate the story of the birth of Athena. To his list, under Class III. must be added a vase in the Museo Municipale of Orvieto, representing "Zeus with the new-born Athena on his knee, between two Eileithyiai;" and under Class I. a fragment of a black-figured vase, found on the Akropolis. Of the figure of Eileithyia on this potsherd only her outstretched hands behind Zeus remain. Athena, fully armed, is springing from the head of her father. 113 Ouite recently still another monument has been added to the list of illustrations of the birth of Athena. It is "a somewhat fragmentary marble relief from Kadi-Keui, the ancient Chalcedon, now in the imperial museum at Constantinople. Zeus is represented between two goddesses, the Ilithyiae, just before the birth of Athena. This is the first known relief representing this scene, and belongs to the latter part of the sixth century B. C., as is shown by its style and the letters of the fragmentary inscription."

In the vase-painting it occurs only once that Eileithyia is assisted by Demeter as goddess of childbirth, and this is on a so-called Tyrrhenian amphora (Mon. dell' Inst. IX. pl. 55 = Furtwängler, Berliner Vasenkatalog, 1704) now in Berlin. Had the figure not been labelled Demeter by means of an inscription, she would without doubt have been identified with Eileithyia, for she has no characteristic peculiarities of her own. We must, therefore, be on our guard lest we overrate the importance of vase-figures as throwing light on the appearance of lost statuary. That

¹¹⁸ Schneider's paper on 'Die Geburt der Athena' is in the Abhandlungen des Arch. Epig. Seminars der Universität Wien (1880), pp. 1 sqq. The vase at Orvieto is mentioned by Karo, in Journal of Hellenic Studies, 1899, p. 140 note 3. The fragment from the Akropolis: Studniczka in 'E $\phi\eta\mu$. 4 $\rho\chi$. 1886, pp. 117 sq. with pl. 8, 1.

¹¹⁴ Quoted from the American Journal of Archaeology, V. 1901, No. 4, p. 462, a summary of an article by S. Reinach, in the Revue des Études Grecques, 1901, pp. 127-137, not accessible to me.

is to say the vase-painters had no typical figure which was reserved for Eileithyia alone. Where Demeter plays the part of goddess of childbirth, she takes on the form, character, and pose of an Eileithyia. On the other hand, the Berlin vase-painting is a welcome verification of our observation that Demeter was sometimes considered a goddess of childbirth, as, for instance, in her sanctuary at Knidos (see above, page 63), and at Syracuse and Tarentum.113 But it seems very rash, indeed, to make use of the appearance of Demeter on a "Tyrrhenian" vase to answer the question whether this kind of pottery goes back to Ionian or Dorian influence. 110 Nevertheless, it is exceedingly remarkable that only on the "Tyrrhenian" vases (Mon. dell' Inst. VI. 56, 2 and 3) do we find the Eileithyiai really assisting in the birth of Athena by laving their hands on Zeus; although this class of vase-painters also makes use of the goddesses of childbirth who are of assistance merely by their divine presence, and by their mesmerizing gestures (Mon. dell' Inst. IX. 55). Not until the period of the Etruscan mirrors do we find, along with the general mode of representation, a reappearance of the realistic and practical conception of Eileithyia as midwife, taking actual part in the processes of birth by supporting Zeus and giving him massage (Gerhard, Etruskische Spiegel, I. 66; V. 6). Just because of this realistic trait, which is a characteristic peculiarity of Ionian art, I am inclined to trace the "Tyrrhenian" vases back to Ionian influence."7

The bronze statuette of Eileithyia from Corinth, to which we

¹¹⁶ See Hesychius, s. ττ. Ἐλευθώ and Επιλυσαμένη. On Demeter as midwife see Loeschcke, in Archäologische Zeitung, XXXIV. 1876, pp. 109, 111.

¹¹⁶ See Loeschcke, in Arch. Ztg. 1876, pp. 108 sq. Winter, in Mitth. d. arch. Inst. in Athen, XIV. 1889, p. 8 suggests that the group was drawn after a Corinthian pattern. From the review of Reinach's article, mentioned above, note 114 it seems that he is inclined to attribute some of the black figured vase-paintings illustrating the birth of Athena to the Megarians. I am unfortunately not in a position to verify this theory.

Antike Gemmen, III. p. 97 note 2, contrary to Thiersch's theory in his dissertation "Tyrrhenische" Amphoren (Leipzig, 1899).

have had frequent occasion to refer, represents the goddess wearing a polos, similar to that on one of the coins from Aigion (see above, page 27). On the other coin, as we have seen, she wears a diadem, very much like the head-dress on two black-figured vases. The diadem is also worn by Thanr and Ethausva, Etruscan goddesses of childbirth, in the representations of those divinities on Etruscan mirrors. But, in general, the vase-pictures figure Eileithyia with flowing locks and without any head-dress whatsoever. Only on red-figured ware is her hair sometimes done up in a knot.118 In the Eileithyia-grotto on Paros Dr. Rubensohn found, as has been noted above, a fragmentary relief, representing, as he believes, Eileithyia, because the figure, whose upper body and head are preserved, is crowned with rays of light. This is a very appropriate emblem for our goddess and proves that also at Paros she was considered a goddess of light. We were able to conclude from the legend, which regarded the original home of Eileithyia as the realms of the Hyperboreans, which means nothing more than Lycia, the land of light, that at Delos and elsewhere Eileithyia was doubtless worshipped as a light-goddess. To find, therefore, in Paros the goddess crowned with beams of light, is a strong argument in favor of the same conception of Eileithyia's nature. We saw that the pre-historic and archaic idols were almost invariably decorated with a necklace. It may be more than mere chance, or a love for ornamental effect, that the vasepainters so frequently give Eileithyia this piece of jewelry. And yet, it need hardly refer to the story of the necklace (Hymn to Delian Apollo) with which Eileithyia was bribed by Iris to assist Leto in her pangs."9

As regards the drapery of the Eileithyiai on the pottery of the black-figured style, we note that the goddess is clad in the Doric

Elleithyia with hair done up: Él Cér. I. 55, 63, 64, 65; with a diadem: Él Cér. I. 57, 65 A; with a pad-like head-gear: Él Cér. I. 57 (the two Eileithyiai to the right of Zeus), Mon. dell' Inst. IX. 55. Than and Ethausva with a diadem: Gerhard, Etruskische Spiegel, V. 6.

¹¹⁹ See Preller-Robert, Griech. Mythologie, I. p. 237 and note 2.

sleeveless peplos, the dress commonly seen on the Attic vases of the archaic period. It is the garb of the Eileithyia-statuette from Corinth. The oldest representation of Eileithyia wearing the Ionic chiton is found on the red-figured Oltos-kylix, and later on some of the coins. On an Etruscan mirror (Gerhard, Etr. Sp. I. 66) one of the birth-goddesses (Thalna) is nude down to her waist. But then, the Etruscans are particularly fond of representing even the most austere deities either partially or entirely nude at times. Because of their special delight in winged deities, they sometimes give wings even to their birth-goddesses, whoever they may be. 100 And yet, neither the Greek vase-paintings nor the Etruscan mirrors throw light on the question whether or not the cultstatue of Eileithyia at Bura was naked, for the vase-painters do not, as a rule, take their inspiration from cult-images; they deal rather with conventional types. Their source for new and original patterns is meagre indeed. This is nowhere better illustrated than on the above-mentioned vase, which depicts Demeter as goddess of childbirth in exactly the same type as Eileithyia. We cannot, therefore, expect to find accurate copies of cult-images in the vase-paintings, nor can we draw any conclusion about the appearance of the real drapery of the Eileithyiai-xoana at Athens, and the figure of that goddess at Aigion. But what we do learn from these vase-illustrations is the conception deeply rooted in the phantasy of the Greek people concerning the deities of childbirth. At every parturition, be it even the miraculous birth of Athena from the head of Zeus, Eileithyiai are absolutely necessary.

The vase-painters figure the Eileithyiai always as helpful and benevolent deities, as can be clearly seen from their pose. The god-

¹²⁰ Winged birth-goddesses on an Etruscan mirror: Gerhard, Etrusk. Spiegel, V. 6. Even Athena (Minerva) is represented on this mirror with wings. On the winged Athena in general, see Savignoni, in Mitt. d. arch. Inst. Röm. Abt. XII. 1897, pp. 307 sqq. On an Etrurian disk-shaped golden bulla found in Vulci (Chabouillet, Catal. 2551) a winged Athena plays the part of a birth-goddess. Cp. Heydemann, 'Dionysos' Geburt und Kindheit.' Zehntes Hallisches Winckelmannsprogramm (1885), p. 15.

desses of childbirth are represented either as actually taking the part of a midwife or as being of assistance indirectly through sorcery. The attitude of the Eileithyiai who are helping in the latter manner is very remarkable and deserves careful analysis. On some monuments these deities stand upright with outstretched arms, the palm opened either outward or upward; on others, moreover, they are moving their arms alternately up and down, at the same time opening and closing their hands. My authority for this statement is based on the fact that quite frequently one hand is upraised and open, whereas the other is lowered and closed.121 From the description of Pausanias, and especially from the types on coins, we are led to believe that in some localities Eileithyia was supposed to make these movements of the arms holding torches in her hands. The gestures of the outstretched hands and of the rhythmic motion of the arms and hands had a soothing, mesmerizing effect, and were symbolic of loosening and unbinding. In this way the goddesses showed their benevolence and good-will, and hastened the birth. Natural magic, the playing of musical instruments and the singing of songs doubtless formed a very important part of the ceremony connected with the birth of a child.123

121 For vase-paintings illustrating the Eileithyiai at the birth of Athena holding the palms of their hands toward Zeus, see £1 Cér. I. 57, 58=Gerhard, Vasenbilder, I. 2; Masner, Wiener Katalog, pl. IV. 237; £l. Cér. I. p. 190. On a black-figured amphora, Masner, l. c. p. 25 no. 223 the palms of Eileithyia's hands are held inwards, but this may be due to the awkwardness of the vase-painter. For the alternately moving up and down of the arms, and the opening and shutting of the hands, see, for example, £l. Cér. I. 59, 60, 62. In Gerhard, Vasenbilder, I. 5, Masner, l. c. pl. IV. 237 etc. the arms are moved alternately up and down, but the hands are open.

122 On the so-called Ludovisi-Throne a nude figure plays the double-flutes (see above, note 63), and Apollo on the vases illustrating the birth of Athena is quite frequently represented playing the lyre, so as to soothe the pains of father Zeus by gentle strains; cp. Wolters in 'Εφημ. άρχ. 1892, p. 228, and Dilthey, in Arch. Epig. Mitt. aus Oesterreich, II. pp. 50 sq. note II. On the singing of songs at birth-scenes. see Plato, Theaitetos, p. 149c. On superstitions in general during the birth of a child, see the instructive remarks by Ploss, Das Weib,* II. pp. 245 sq. On gestures which retard birth, see Wolters, l. c. pp. 228, 226 note 2.

The Romans, indeed, believed in an opposite gesture, the crossing of fingers or of legs, which retarded birth.¹²² The outstretched arms of Eileithyia in the vase-paintings recall a passage in the Anthology (Anth. Pal. VI. 271), where Artemis appeared at the birth of a child without her bow, and with outstretched, gentle hands. The gesture of the outstretched hands or of the swinging of the arms was a sort of magic practised not only by the birth goddesses, but also by all such deities who wished to show their willingness to be of assistance or support to mankind.¹²⁸

While discussing Eileithyia Eulinos in Delos and Kleitor (see above, page 30) I stated that in the east pediment of the Parthenon, Moirai took the place of Eileithyia. It is now necessary to verify this statement. The entire evidence rests on the representation of the birth of Athena, sculptured in relief on a well-curb or puteal, now in Madrid, which, according to my belief, Professor von Schneider, with good cause, brought to bear on the subject, and used as a basis for his reconstruction of the pediment figures. Professor Sauer's observations on the floor of the pediment prove beyond doubt that Zeus was seated in profile to the right, just as on the

123 The demons on the kylix from Kyrene show their homage and goodwill by stretching out their hands; see Studniczka, Kyrene, p. 18 fig. 10—Roscher's Lexikon, II. I, p. 1730 fig. 5. For this gesture, indicative of succor, in connection with the labors of Herakles and Theseus, see Wiener Vorlegeblätter, 1889, pl. IV. fig. 6b; pl. V. figs. 4b, 1b.—G. Körte, in Archäologische Zeitung, 1876, p. 191 note 3 explains this gesture of the Eileithyiai differently. He asserts that they thereby express their astonishment, because Athena was born by means of the ax of Hephaistos and not through their help. But on the vase, Mon. dell' Inst. VI. 56, 3, which represents the moment before the birth, one of the goddesses of birth is massaging the head of Zeus, whereas the other is making this hocus-pocus gesture of assistance and good-will. In this case, moreover, it is impossible to think of an expression of astonishment on the part of the goddess, because the miraculous birth has not yet taken place. Cp. also Sittl, Gebärden, pp. 322 sq.

Wiener Vorlegeblätter, Serie VIII. pl. XI. 3=Baumeister, Denkmäler, I. p. 219. See also Sauer, in Mitt. d. arch. Inst. in Athen, XVI. 1891, pp. 69, 85; and Furtwängler, Meisterwerke d. griech. Plastik, pp. 246 sq.=id., Masterpieces of Greek Sculpture, pp. 463 sqq.

Madrid relief. Now, since, with the exception of the group of the Moirai, the relief of the well-curb shows strong influence of the Parthenon pediment-figures, we are safe in inferring that the three sisters on the relief, who are by their attributes proven to be the Fates, may well be used to throw light on the correct naming of the beautiful group of three sisters commonly known as the "Thauschwestern." To be sure, the Moirai of the puteal are, as far as artistic composition is concerned, entirely independent of the "Thauschwestern," but as Professor Furtwängler has pointed out, this is due to the fact that the relief is designed in a space of equal height, whereas the pediment figures are designed in a triangular space. The differently shaped surfaces at the disposal of the artists necessitated in both cases the peculiarity of the grouping. That the artist of the puteal copied a renowned group of the fifth century B. C. for his central figure is proven especially by his type of Athena, which is found in more replicas than Professor von Schneider was in a position to know of at the time he wrote his inspiring article. In addition to the material collected by him (on pp. 39 sqq.) of similar Athena-types, three important copies must be added: (1) the Athena-statuette found in Epidauros and first published by Professor Petersen; 126 (2) a marble statuette reported to have come from Athens, now in the Berlin Museum (Beschreibung d. Skulpturen, no. 74); (3) the Athena of the gigantomachy on the Pergamene altar-relief (Baumeister, Denkmäler, II. pl. 38, fig. 1420). Not only the Athena but also the Nike of the lastmentioned monument is closely related to the Athena-group on the puteal in Madrid, with the only difference that the Nike on the Pergamene altar is flying toward Athena from the right. I am convinced that the artist of the Pergamene Athena-group, as well as the artist of the well-curb, took the middle group of the east

¹²⁵ See Amelung, Basis aus Mantinea, pp. 13 sq.

¹²⁶ See Petersen, in Mitt. d. arch. Inst. in Athen, XI. 1886, pp. 311, 314; Έφημ. dρχ. 1886, pl. 12; Kabbadias, Γλυπτά, no. 274; id., Fouilles d' Epidaure, p. 46 no. 49.

pediment of the Parthenon as his prototype, and that the Pergamene sculptor held even more closely to his original, as far as Athena and Nike are concerned, than did the sculptor of the Madrid puteal, because of the position of Nike. On the puteal the two parallel lines produced by Athena and Nike spoil the artistic effect of the composition, and equally unfavorable is the position of Nike between Zeus and Athena. I cannot agree with Dr. Six that Nike held this position in the Parthenon pediment so as to form a connecting link between father and daughter. From the puteal one is liable to get the impression that Nike and not Athena has just sprung from the head of Zeus, as Professor Kekulé von Stradonitz has very aptly put it.127 All these difficulties vanish, if we imagine the goddess of victory counterbalancing Athena and sweeping down from the right, in order to crown the newly born goddess. I, at least, am inclined to imagine the central scene of the east pediment of the Parthenon to have been thus composed. Of the remaining figures of this pediment there are none that would suit the character and pose of Eileithvia, and the fact that the Fates were substituted for her on the puteal at Madrid, is sufficient proof that the same substitution took place on the pediment.

As regards the birth of Dionysos on vases and reliefs, Eileithyia plays a less important role. On a red-figured vase of the fourth century B. C., made in southern Italy—where it is now preserved is unknown—Eileithyia is figured fully draped; her hair done up behind with a fillet. She is about to receive in a piece of cloth the little Dionysos-child, who is just arising from the thigh of Zeus. An Etruscan mirror (Gerhard, Etr. Sp. I. 82) may well be compared with this representation, for it shows us Thalna,

¹²⁷ See Kekulé, in *Jahrb. d. arch. Instituts*, 1890, p. 199; and Six, *ib*. 1894, p. 86.

¹²⁸ See Heydemann, 'Dionysos' Geburt und Kindheit.' Zelntes Hallisches Winckelmannsprogramm, 1885, p. 13; figured in Lenormant, Gazette Archéologique, VI. 1880, p. 72.

¹²⁸ On the piece of cloth used at the birth of a child, see Wolters, $\dot{E}\rho\eta\mu$. $\dot{a}\rho\chi$ X. 1892, p. 228 note 2.

fully draped, taking the new-born Dionysos from the thigh of Zeus (Tinia). Whether the winged goddess of birth on the child's sarcophagus, called the Nugent sarcophagus, and the likewise winged goddess wrapping, in a most realistic manner, a bandage around the leg of Zeus on the fragment of a marble relief, may be identified with Eileithyia is very doubtful. How the Eileithyia in the painting of Ktesilochos expressed their services at the birth of Dionysos is unfortunately not reported by Pliny (*Nat. Hist.* 35, 140). Nor does it seem probable that Eileithyia was represented on the frieze from the Roman stage of the Dionysos theater at Athens, if the group which is usually held to illustrate this scene is correctly interpreted.¹³¹

Herewith the monuments at present known to us as illustrating Eileithyia are exhausted. It would lead us too far to discuss in detail the birth-scenes on Roman sarcophagi, *ctc.*, especially since the assisting women cannot be named; that is to say, we do not know whether human midwives or goddesses of childbirth were

¹³⁰ For the Nugent sarcophagus, see Heydemann, 'Dionysos' Geburt und Kindheit,' pp. 8 sq., 16 sq. It is figured in Müller-Wieseler, Denkmäler d. Kunst, XXXIV. 392=Mon. dell' Inst. I. 45A. For the fragment of the marble relief, see Visconti, in Bullettino della commissione municipale (Roma), II. 1874, pp. 89 sqq. with pl. I. fig. 3; cp. Heydemann, l. c. p. 17.

181 The figures in high relief which decorate the front of this stage, erected by Phaidros in the third century A. D., were not originally made for such a purpose. The workmanship, which is too good for that period, belongs rather to the early Graeco-Roman period. The group assigned by Miss Harrison (Ancient Athens, p. 282 fig. 23) to the birth of Dionysosshe doubtless follows the interpretation given by F. Matz, 'I rilievi del proscenio del teatro di Bacco in Atene,' in Annali dell' Instituto, 42 (1870), pp. 97 sqq., an article which at present I am not in a position to procure seems to me to be less suited to the occasion than another group of this frieze (fig. 25 in Miss Harrison's book=Brunn-Bruckmann, Denkmäler griech. u. röm. Sculptur, no. 15. 1). Here Zeus, almost entirely nude, is seated facing the left, and the child, now broken away, was doubtless just springing from his father's left thigh; for, that some foreign object about the size of a child was modelled in one piece with the left upper leg of Zeus is apparent from its battered state. If this interpretation be correct, then the female figure dressed in the Doric sleeveless peplos and himation is Eileithyia about to receive the child.

meant. The Greek vase-paintings have given us a sufficiently clear picture of Eileithyia, as she was believed, in the imagination of the masses, to have appeared, and to have conducted Additional conclusions regarding the appearance of her cult-images, or the expression of her face, cannot be drawn from the vase-pictures. It has seemed unnecessary to take all the other divinities into consideration, who are present on the monuments along with Eileithyia at the birth of Athena. The birth took place on Mt. Olympus, and among the inquisitive deities who are hastening to the scene, none were of actual assistance in the process of the birth except Hephaistos or Prometheus. It would be a mistake to conclude that all the gods and goddesses who were present on this occasion must therefore be considered divinities of childbirth. In the case of Apollo, however, since he is almost always associated with this scene playing the lyre, we may perhaps be allowed to attribute his presence to the healing power of music.

CHAPTER V

Conclusion

It has been my aim in this paper to throw as much light as possible on the cult and character of Eileithyia, by making in the first place a careful study of the literary evidence regarding her sanctuaries and her nature. Such a study necessarily forms the basis of all our knowledge concerning the religious conception of the gods. But it seemed to me quite necessary to approach the subject from a new standpoint, by making a careful collection of the votive offerings, which, as far as I know, have been sadly neglected in all works on mythology and religion. It is clear that we get a much more complete picture of Eileithyia-sanctuaries, if we have in reality seen the various kinds of offerings which customarily decorated her sacred precincts. Again, we obtain a clearer idea of what the people thought of Eileithyia, after having seen the monuments which illustrate her functions.

It must be said in conclusion, that the word "Eileithyia" has not yet been satisfactorily explained. Some argue that "Eileithyia," which appears in so many forms, is a borrowed word of pre-Greek origin. Others say that it goes back to the verb είλω, and contains the idea of pressing during parturition, or of revolving, as descriptive of women in travail. Be that as it may, the participial ending, νια, points to an active goddess who participates in the process of child-bearing. Indeed, as Professor Usener has aptly put it, the "Eileithyiai" were originally the labor-pains themselves. On the whole, then, we see that the Eileithyiai, because

¹⁸² See Usener, in Rheinisches Museum, XXIII. p. 333 note 45.

¹⁸⁸ See Enmann, in Roscher's Lexikon, II. 2, p. 1969.

Götternamen, p. 299. Cp. Fick-Bechtel, Personennamen, p. 454-88

of the formation of the word, and again, because of their unlimited number, were originally held to be the travail-pangs themselves, which every woman suffered in childbirth. When the throes were felt, it was thought that Eileithvia had come. She could, therefore, also be called Eleutho (ξρχομαι), referring to the coming of the pains. But with Eleusinia, the Eleusinian goddess Demeter, Eleutho=Eileithyia has nothing in common, although the forms have been connected by some,185 and although Demeter in Syracuse and Tarentum was called Eleutho and Epilysamene. The Eleusinian Demeter is a coming goddess in an altogether different sense.186 As the personification of travail-pangs Eileithyia is closely related to the Moirai. Indeed, she was even identified with the Fates, and as one of their number, is pre-eminently the protecting deity of women, or, if we so choose to put it, every woman has her own Eileithvia, without whom it would be impossible to give birth to children.

From her original home and attributes we learned that Eileithyia was closely associated with deities of light. It may have been due to this, that she was held by some to be a lunar goddess. Whether she originally had any connection with the moon, is difficult to say, although we have evidence that she was called Selene, and that the moon was supposed to influence the processes of birth. Furthermore, we know that Eileithyia was euphemistically called Eukoline, an epithet of Hekate as a lunar and birth goddess. In Argos, too, she was held to be a moon-goddess, for people sacrificed dogs to her for easy delivery. It was necessary to give Eileithyia this euphemistic name, Eukoline, because by nature she was held to be an austere deity, hostile to mankind, who came with bitter anguish. And so she had to be appeased and propitiated

²³⁵ See Toepffer, Attische Genealogie, p. 221 note 2; Bloch, in Roscher's Lexikon, II. 1, p. 1330.

¹⁸⁶ See Pfuhl, De Atheniensium Pompis Sacris (Berlin, 1900), p. 60 with note 29.

 ¹⁸⁷Cp. Nonnos, *Dionysiaka*, 38, 150; Plutarch, *Quaest. Symp.* p 659 A.
 ¹⁸⁸Cp. Theokritos, *Id.* 27, lines 28 sq.

with all kinds of sacrifices, vows, and gifts. Indeed, in the second Orphic Hymn she is literally smothered with the most flattering epithets.¹³⁰ When once appeased, she was the very personification of good-will, as we learn from the gesture of her outstretched hands and from her soothing touch.¹⁴⁰ As a well-wishing and kind-hearted goddess she is above all else Kourosoös and Kourotrophos, which means that she is not only the protectress of women, but also the guardian-angel, so to speak, of children.

Only occasionally is Eileithyia a motherly goddess. As such there is a close relationship between her and Aphrodite Ourania. Whether, however, as a goddess of generation and procreation, she was in any way connected with the pre-historic female idols, which were discussed in the first chapter of this paper, cannot be determined as long as such idols are not found in an Eileithyia-sanctuary.

¹⁸⁹ See also Bruckmann, Epitheta Deorum, 94 sq.

¹⁴⁰ Cp. Ovid, Mctam. X. 510 sq. where Lucina touches Myrrha in travail with her gentle hand, while reciting some incantation. In like manner it must also be explained that Cheiron=χειρίσοφος the god of the "pain-mitigating hand" was received into the circle of Theran birth-deities (I. G. I. fasc. III. 360). Cp. also Herondas, IV. 17 sq. and the Krinagoras Epigram, Anthol. Palat. VI. 244: μαλακαῖς χερσίσὺν Ἡπιόνης. When Andromache of Epeiros prayed to Asklepios at Epidauros for offspring, he merely touched her naked body, and she bore her husband Arybbas a son (Cavvadias, Fouilles d' Épidaure, p. 30 no. 2 lines 61-63). For birth-goddesses who lay their hands on their patients, see Mon. dell' Inst. VI. 56, 2-3; Gerhard, Etruskische Spiegel, I. 66, ib. V. 6=Mon. dell' Inst. IX. 56, 3. Cp. also Marx, in Mitt. d. arch. Inst. in Athen, X. pp. 188 sqq. and Maass, De Aeschyli Supplicibus, pp. 10 sq., 19.

THE RIGHT OF SANCTUARY IN ENGLAND



THE UNIVERSITY OF MISSOURI STUDIES

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THE RIGHT OF SANCTUARY IN ENGLAND

A Study in Institutional History

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Dedication

this Study
is affectionately dedicated
to my Sather,
the Hon. Mr. Justice Trenholme,
of Montreal, Canada



THE RIGHT OF SANCTUARY IN ENGLAND

INTRODUCTORY

THE ORIGIN AND DEVELOPMENT OF THE RIGHT OF ASYLUM IN EUROPE

The progress of the human race toward greater civilization and order is in no way better understood than by studying institutions which have now disappeared. The growth of strong and settled national governments and the formation of organized judicial systems, insuring a proper administration of justice, did much in Europe in the later Middle Ages to clear away abuses and remedy social evils. Amongst a host of mediaeval customs, more or less injurious to society, which finally disappeared in England at the dawn of the Modern Era, was that one known as Right of Sanctuary, by which criminals of almost every sort had been allowed refuge and protection from the hand of the law in churches, abbeys, and other sanctified places. In the dark ages of the world's history, or in times of mediaeval violence and rapine, such a privilege might well be allowed as a protection against too summary and hasty vengeance. The state of society in the Middle Ages was such that to the Church and to religion alone could men look for protection against murder and violence disguised under the name of private justice. But with the advent of a well-organized judiciary and even-handed justice, sanctuaries and asylums became places of escape rather than refuge, and

a curse rather than a blessing to men. Under these circumstances it was not strange that the State insisted on their suppression, and the doing away of sanctuary privilege, and though the Church fought long and stubbornly to retain its immunities in the matter of protecting criminals it had at last to submit.

It is to trace the history and customs of sanctuary as it existed in England that this essay is written, after a careful study of records and evidence as to the use and abuse of the privilege. It is hoped to show that sanctuary-seeking was far more general in England than is ordinarily believed to have been the case and that the English sanctuary places, especially during the later period of their history were important centers of criminal resort. Many peculiar forms of sanctuary procedure and custom will be commented on and, incidentally, the kindred legal institution of abjuration (abjuratio regni) will receive some attention, though this feature of the right of sanctuary has already been treated in a scholarly manner by another writer.1 Before, however, proceeding to a detailed treatment of sanctuary in England, some consideration must be given to the previous history of religious protection to criminals and fugitives in the ancient world, and in connection with the early Christian Church, under the name of asylum.²

The general idea of protection or asylum afforded to fugitives is one, undoubtedly, of exceedingly ancient origin. It is connected, often, with the beginnings of city states and new communities. Romulus, the mythical founder of Rome, for

¹ Réville, Abjuratio regni, Revue Historique, Sept. 1892.

² Asylum is the Latin and English form of the Greek ἄσυλον, a place free from robbery or violence. In modern times asylum has come to mean an institution which shelters unfortunate or destitute persons. In French and German, however, the word still retains its older meaning as a place of refuge, a sanctuary. Mazzinghi, Sanctuaries, p. 9; Bulmerincq, Das Asylrecht, p. 32, note.

example, is said to have made the Palatine hill an asylum for fugitives, preparatory to the building and peopling of his city, and the Romans themselves clung with proud humility to this myth and believed that their ancestors had been a mixed concourse of outlaws and refugees. The myth or legend has, probably, no greater significance than that in new communities fugitives and criminals were not unwelcome, as they would increase the male population. The story of the asylum offered was, without doubt, a later addition from the pen of some historian.³

But we can go further back than the founding of Rome and obtain what may perhaps be considered as more authentic examples of the right of asylum, namely the cities of refuge instituted by the Israelites under Moses and Joshua. By all odds the state system of asylum for the protection of homicides, which they devised and maintained, is the most remarkable on record. At first there were three Hebrew cities of refuge whither he "who should kill his neighbor and hated him not in times past" could flee for protection. Later the number of these cities was increased to six, three on either side of the Jordan. Once the slayer had reached one of these cities he was safe from the violence of the avenger, but must dwell in the city of refuge until tried before the congregation and until the death of the then high priest. When these conditions were accomplished, the slayer could return to his own home and

³Plutarch, Romulus, ed. Langhorne, p. 16: "As soon as the foundation of the city was laid they opened a place of refuge for fugitives, which they called the temple of the Asylaean God. Here they received all that came, and would neither deliver up the slave to his master, the debtor to his creditor, nor the murderer to the magistrate; declaring that they were directed by the oracle of Apollo to preserve the asylum from all violation. Thus the city was soon peopled for the houses at first did not exceed a thousand." Hegel, Philosophy of History (ed. Morris), p. 214, has seemingly taken this story as fact.

city.⁴ Such a system as this would protect the homicide from too hasty or summary vengeance while at the same time punishing him by making him a fugitive and exile. Other references to the use of asylum amongst the Hebrews occur in Biblical history. In one instance at least the fugitive seeks protection at the altar, thus implying the existence and recognition of the sanctuary afforded by religion.⁵

Amongst the Greeks we find the right of asylum existing from quite ancient times. Almost every temple afforded protection to criminals, even to those who had committed the worst crimes, and no fugitive could be molested or dragged forth. Nevertheless, they could be starved into surrender and this no doubt was frequently done. Several very notable cases of the violation of the right of asylum occur in Greek history. At Athens the temple of Athena on the Acropolis was a noted asylum, and all seeking refuge there were inviolable. Thus it was that when, about 628 B. C., the followers of Cylon who had fled to this temple for refuge were massacred by the Archon Megacles, the family to which Megacles belonged, the Alcmeonidae, incurred the curse of impiety.6 Those who took refuge at altars or in sacred places were regarded as suppliants and held sacred as being under divine protection. Another notable instance of violation of the right of asylum is told in the sixth book of Herodotus in connection with the war between the Argives and the Spartans. Cleomenes, the Spartan king, having driven a number of the enemy to take refuge in a sacred place, induced certain of them, by false promises, to come forth and then slew them in cold blood. The ones who remained, learning the fate of their companions, refused

^{*}See for the Mosaic law, Exod. xxi, 13; xix, 7, 10, and also Joshua xx, 5, 6.

⁵ Case of Adonijah, in I. Kings, ch. i, 50-53.

⁶ Thucydides, Histories, I, 126, 134; Plutarch, Solon.

to come out or surrender and the impious king, therefore, ordered the place to be set on fire. The unfortunate fugitives seem to have perished in the flames or at the hands of their adversaries. Cleomenes, the author of the outrage, was, according to the Argive tradition, punished for his sacrilege by the gods when later he was overtaken by madness. ⁷

As in later times in Europe, so in Greece the right of asylum became an abuse rather than a benefit. Asylums became so numerous that they hindered the proper course of justice, and instead of affording a refuge from revenge they harbored criminals of the worst sort. This caused the Athenians to limit the right to such persons as through unpremeditated crime or rash deeds were exposed to cruel or summary vengeance. But many of the other states in Greece were not so wise, and the asylums continued, through the unlimited protection they afforded, to encourage lawlessness and crime, until at length, taught by experience, their right to protect was modified and restricted to special classes of criminals. Being divine in its origin, the right of asylum could not be abolished without sacrilege, but it could be, and was, much limited and restricted. It is said that in time of war the Greek asylums were crowded with suppliants, while in time of peace they were often almost deserted. No better commentary as to the function of such refuges in classical times can be given than this statement, and no doubt the asvlums often saved the lives of those defeated by the fortunes of war.

After Roman power had become firmly established in Greece, efforts were made to suppress many of the Greek asylums. Tacitus tells us that in the time of the Emperor Tiberius, all the so-called asylums of Greece were ordered by the Roman Senate to produce legal proofs of their right to exercise the privilege of protecting criminals, and that by this means many were suppressed as they could not comply with the

⁷ Herodotus, Bk. VI, ch. 8o.

order. This, in all probability, did away with many of the evils attendant on the multitude of asylums which existed in Greece.8

The right of asylum amongst the Romans was better regulated and limited than amongst the Greeks. The practice of seeking protection in the temples does not seem to have been so generally resorted to, nor do the Roman sacred edifices seem to have possessed the same rights of asylum as the Greek ones. Roman law, indeed, took little or no account of religious sentiment when it came in conflict with the proper punishment of evildoers and criminals. The right of asylum was, therefore, strictly limited and only afforded protection and immunity until formal inquisition could be made and judgment, based on evidence, given. To the Romans, asylums were places to which the unfortunate or misguided could flee for temporary immunity from violence, and Tacitus expressly remarks that in Rome no criminals fled to the Capitol or to other temples of the city in order to enjoy protection and immunity in the commission of crime. 9

Under the Empire, however, it was the general practice for criminals and fugitives, especially slaves, who wished for protection, to flee for safety to the statues or busts of the Caesars, although such resort might not do the criminal any real service in the end.¹⁰ In fact the Emperor Antoninus Pius issued a decree declaring that if a slave, in any of the Roman provinces, fled to a temple or to the statues of the Emperors to escape his master's ill-

⁸ Tacitus, Annals III, 60. Suetonius in his Life of Tiberius (ch. 27) states that all asylums throughout the Roman Empire were abolished by that Emperor. This statement is inconsistent with the more restricted one made by Tacitus, and is probably exaggerated.

⁹ "Neque quemquam in Capitolinum aliave Urbis templa profugere, ut eo subsidio ad flagitia utatur." Tacitus, *Annals*, III, 36. Mazzinghi, *Sanctuaries*, 110.

¹⁰ Ex vinculis ad custodia detentus ad potentioribus." Digest, 48, tit. 19, sect. 28.

treatment, then the governor of the province could order such a slave to be sold as if he were not a fugitive. 11

The right of asylum was never totally abolished by the Romans, but it was made a part of their legal system and a support rather than a hindrance to their criminal procedure. The fugitive would in most cases be taken from the asylum and would make his defense and justification, if any were possible, before the magistrate. Then if the law condemned him he would have to suffer the just penalty; the asylum only saved him from summary and immediate vengeance and afforded a breathing space before trial. Thus we clearly see that amongst the Romans the right of asylum had a more rational development than with the Greeks; a development more consistent with the Roman idea of the state, and with Roman law and custom.

The practice of allowing Christian churches to extend rights of protection to criminals and fugitives within their precincts is said to date from the time of Constantine's Edict of Toleration, 313 A. D. Undoubtedly the introduction of Christianity as the state religion, which soon followed, wrought a great change in regard to the right of asylum. The protection afforded by the Christian churches was greater than that given by imperial law to temples and statues. The custom of resorting to churches soon became well established in cases of wrongdoing, for when, in 392 A. D., Theodosius the Great made a law concerning church asylum, it was to explain and regulate the privilege. Fifty years later another Theodosius, the Younger, made a new law by which the then existing privilege was extended from the altar and nave of the church to the buildings, courts, and parts adjacent, contained within the walls. An enactment of a temporary nature excepted the Isaurian robbers from the privilege. 12 The constitutions of

¹¹ Inst. Gaius, I, 53: Inst. Just., I, tit 8, sect. 2, where the words of the rescript of Antoninus are quoted.

¹² Codex Theodos., lib. IX, 45: "De hiis qui ad ecclesias confugiunt," leg. 4; also lib. IX, tit. 35

Theodosius the Younger were confirmed by Pope Leo I., with the added provision that the steward and advocate of the church should act as inquisitors and examine all persons seeking asylum and then take action on the evidence produced. 13 The early Christian Church was strongly opposed to the shedding of blood and ready to do all in its power to prevent violence which might result in bloodshed. Thus the clergy speedily became the great intermediaries between criminals and those who desired vengeance, and acted as ambassadors of mercy before the throne of justice. Fugitives who had taken refuge in Christian churches were interceded for, slaves fleeing from cruel masters were protected, unfortunate debtors in danger of imprisonment were allowed temporary shelter until a compromise could be reached. All this, no doubt, besides tempering the administration of public and private law, increased the reverence for human life in the popular mind and associated the Church and religion with ideas of sanctity and mercy. 14 But there was another and darker side to the right of asylum during the early Middle Ages, for the privilege seems to have been greatly abused. The Canon law and the decretals of the Popes placed the right of asvlum on a far different footing from the Roman law. Certain classes of offenders had been excluded by the Roman codes, debtors, by the law of Theodosius the Great, murderers, adulterers, and committers of

¹³ Schaff-Herzog, Cyclopaedia of Religious Knowledge, vide Asylum, vol. I. The date 466 A. D. given by these writers is clearly wrong, as Leo died in 461.

¹⁴Lecky, History of European Morals, II., 41-42; see, also, chapter on Right of Asylum in Bingham, Antiquities of the Christian Church in Works, Book viii, ch. 2. Theodoric, king of the Ostrogoths, exacted a promise from the masters of fugitive slaves that such slaves as sought sanctuary should not be punished. He allowed a slave one day's sanctuary protection. See on the general subject of the sanctuary protection offered to fugitive slaves, Mazzinghi, Sanctuaries, pp. 86-90.

rape by the Novella of Justinian. 15 Under these restrictions the early church had exercised and maintained the privilege, and Pope Boniface V. in a decretal of the year 620, had expressly sanctioned the right of churches to protect delinquents.16 But with the increase of ecclesiastical power in Europe the right of asylum, which had been designed to extend protection to the innocent maliciously pursued, to the injured, the oppressed, and the unfortunate, by granting a delay until the case could be properly tried or adjudged, was so much extended that the most atrocious and guilty of malefactors could be found enjoying immunity within sacred walls and bidding defiance to the civil power. If the Romans had gone to one extreme, then the Christian Church of the Middle Ages went to the other. As early as 441 A. D. the Council of Orange ordered that no fugitive seeking sanctuary should be surrendered, while the synod of Orleans in 511 extended the privilege to the Bishop's residence and thirtyfive paces beyond the walls of the building—the triginta ecclesiastici passus. 17 Thus, in spite of being limited by secular legislation, to which little real attention was paid, the right of church asylum came to be firmly established in Europe as a Christian custom and institution, and as of importance to the church and clergy generally. It was to remain so throughout the Middle Ages, and into modern times even, until its abuse so far outweighed its use as to render its abolition a necessity.

¹⁵ Novella, XVII, c. 7. For other references see Cod. Just., lib. I, title XII; Cod. Theodos., IX, 35, 45. Thirty days' protection was usually allowed. Justinian, Novella, XVII, c. 6; Bingham's Works, vol. III, p. 207.

¹⁶ Spelman, Glossarium, vide, Sanctuarium, 620-25 A. D.

¹⁷ Bingham's Works, vol. III, p. 214, and note.

CHAPTER I

AN OUTLINE OF THE HISTORY OF SANCTUARY

Owing to the early Christianizing of Britain it is not at all improbable that the right of church asylum existed in England long before the coming of the Saxons and their subsequent conversion. By some of the mediaeval chroniclers the practice of allowing churches to shelter and protect fugitives is ascribed to a mythical British king, Lucius, who is supposed to have ruled Britain in the second century. But this early period of British history is so obscure, so mythical, and so legendary, that no sure footing for the historian can be found in it, and though the practice of taking sanctuary in churches may have existed amongst the early British Christians, and in all probability did exist, we have no definite or trustworthy record of the fact. Indeed, it is not until the beginning of the seventh century that we find any mention of the right of churches in England to afford protection to fugitives within their walls.

When, in 597 A. D., Augustine with his forty monks landed on the shore of Kent, he probably brought into England a new respect for sanctified places. The north country was being rapidly Christianized by missionaries from Iona and there, also, the protection afforded by churches and shrines must have been recognized. Christianity was soon the national religion of the English, and though the Roman form triumphed over the British at the Council of Whitby, yet both inculcated the respect for holy places and for the sanctity of churches which is the basis of the right of sanctuary. Within a few years of the coming of the Apostle of the Saxons, as

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Augustine was called, an explicit reference to church peace occurs in Anglo-Saxon legislation. Soon after his conversion and baptism in 597 A. D., Ethelbert of Kent drew up a series or code of laws, the earliest known Anglo-Saxon code, and in the first of these laws is the enactment that the penalty for violation of church *frith* is to be twice that exacted for an ordinary breach of the peace. Although brief, this reference to the sanctity of churches is important, as showing how quickly they came to be recognized as inviolable.

No further documentary or other evidence as to the existence of sanctuary 2 privilege in England occurs until late in the seventh century. In the Venerable Bede's Life of St. Cuthbert, the holy bishop of Lindisfarne, who died in 687, an explicit reference to sanctuary occurs. This is believed to be the earliest reference to the existence of the custom in the north of England, and it constitutes an important link in the history of sanctuary. As the holy man lay dying, Bede tells us, he requested that his body should be buried on the island of Farne, but the monks of Lindisfarne earnestly desired that his remains should rest in their abbey on the mainland. The aged saint sought by his words to dissuade them, saying: "I judge it to be more suitable to ye also that I should rest there, on account of the incursions of fugitives and of evildoers of every sort who, when to my body they have fled by chance, you will often find it necessary to intercede for with the powerful ones of the time, and also endure much labor on account of the presence of my body." 3 But the monks were not to be dissuaded from preserving such a relic as the body of the saint, and his remains were carefully

¹ Ethelbert, I. cap. i., see Thorpe, Ancient Laws and Institutes of the Anglo-Saxons, vol. I, p. 3.

² The term sanctuary (sanctuarium) was that commonly used in mediæval England, and is still used to-day, to denote sacred places, and came to be applied to the custom or privilege of taking asylum.

³ Bede, Opera Historica, vol. II, Vita S. Cuthberti, p. 121.

guarded at Lindisfarne as the most precious treasure the church there possessed. In the ninth century, when all northern England was overrun by the Danish invaders and the island of Lindisfarne attacked, the pious monks fled with their precious relic, which, finally, was deposited in the cathedral church at Durham. There the shrine of St. Cuthbert became one of the most famous places in England for sanctuary-seekers to resort to.

In the south of England the immediate successors of Ethelbert of Kent have not left us any definite sanctuary legislation. It is not until the time of Ine, king of Wessex, at the close of the seventh century, that we have further mention of the privilege existing. In or about the year 680 Ine published a code of laws, the fifth enactment of which provides definitely for sanctuary-seekers. By this act any person who had committed an offense worthy of death could save his life by fleeing to a church, and then making satisfaction for his crime as right required. If any person who had committed a crime punishable by stripes took sanctuary, the punishment would be remitted. 4 This law of Ine's was a distinct advance on previous known legislation in England, and by many is regarded as marking the real origin of the legal right of sanctuary in England. There is much to be said for this view as Ine's law is undoubtedly the earliest known piece of English legislation in which sanctuary is definitely referred to, yet almost a century earlier Ethelbert had prescribed a heavy penalty for breach of church frith, and the previous history of the right of asylum would lead one to suppose that whereever there were Christian churches, there the privilege of asylum would also exist.

But the religious element is not the only one to be found in the early history of sanctuary in England. Another ele-

⁴ Laws of Ine, cap. 5, Thorpe, Ancient Laws, I, 26.

ment played an important part and must be taken into account, namely the King's Peace. There were two kinds of peace prevalent in Anglo-Saxon times, the Peace of the King, or royal peace, and the Peace of the Church, Church frith or gryth. The latter peace belonged to every church or sacred edifice; the former was the peace and protection of the central authority and could be granted by the king to specially favored places. Generally speaking, the places endowed by royal charter with the King's Peace were the great Benedictine abbevs, or nunneries, scattered throughout England. Thus, frequently, monastic edifices, as abbey churches, priories, chapels, and other such places, possessed both the peace belonging to the Church and that belonging to the Crown. On the whole, however, it was rather on the peace of the Church than on that of the king that the English sanctuaries, and the fugitives who sought their shelter, relied. As I have said, many of the great monasteries possessed both kinds of peace and so were endowed with sanctuary rights both de facto, on the score of religion, and de jure on the score of possessing royal charters granting them special sanctuary privileges and immunities. This gave rise to a group of great chartered sanctuaries throughout England, standing distinct from the general class of churches and consecrated places, and possessing greater powers, privileges, and immunities.

Ine's law concerning those who fled for refuge to churches doubtless remained in force, in Wessex at least, through the reigns of succeeding kings. Almost one hundred years later, we find Alfred the Great, in 887, enacting that fugitives fleeing to a church to escape the consequences of crime were to have protection for three days. In another and later law of Alfred's, seven days instead of three were allowed. Anyone who harmed a fugitive during these days of grace was to make bot or compensation for the injury, according to the gravity of the offense, and also pay one hundred and twenty shillings to the kindred of the sanctuary-seeker in

atonement for the breach of church frith. ⁵ In the year 930 a law of King Athelstan allowed the fugitive to remain nine days within the sanctuary of the king, of the church, or of a bishop; or three days in that of an ealdorman, of an abbot, or of a thane, and during this period the person of the fugitive was to be inviolable. ⁶

King Athelstan is also said to have granted to the church of St. John of Beverley its first charter of liberties, in which important sanctuary privileges are conceded. The sanctuary limits were to extend a league, or something over a mile, from the church door, in every direction, the bounds to be marked. Within this space all fugitives were to be safe from molestation under penalty of heavy fines, which increased with the proximity to the high altar of the violation. The distance from the limits to the altar was divided into six parts. No slaves fleeing from their masters were to be suffered to dwell for any time within sanctuary, but the canons were to endeavor to reconcile such slaves to their masters-"quia servus pecunia domini sui est." Nor was any freeman to be allowed to bring into sanctuary moneys belonging to his master. Such in brief was the constitution of a great charter sanctuary in Anglo-Saxon times. 7 In 974 we find King Edgar granting similar immunities, as regards sanctuary-seekers, to the Abbey of Ramsey, 8 and these are but two examples of many such grants by the Saxon kings. Monasteries were everywhere springing up in England, and charters containing sanctuary clauses were being constantly granted. Such concessions did

⁵ Laws of Alfred, cap. 2, Thorpe, Ancient Laws, I, 61; Mazzinghi, Sanctuaries, p. 12, quotes the law at length and comments on the interpretation of it.

⁶ Laws of Athelstan, III, 6, IV, 4.

⁷ Sanctuarium Dunelmense et Beverlacense, Surtees Society, pp. 97-101.

⁸ Cartul. Monast. de Ramseia, R. S., vol. II, 57, 71.

much to make the institution of church asylum more widespread and general. They also helped to create a number of recognized sanctuary places where fugitives gathered, being sure of protection and sustenance from the religious of the place.

By one of King Ethelred's laws, made towards the close of the tenth or at the beginning of the eleventh century, a sanctuary-seeker who had committed a capital offense had either to give the proper wer qild, or compensation for the life of his victim, or to go into perpetual thraldom or imprisonment. If he were able to free himself, a surety or bondsman had to be furnished for future good conduct or, in default of such surety, a solemn oath to keep the peace and live an honest life had to be taken. Should this oath ever be broken, sanctuary would not be allowed a second time. 9 A further elaboration of the laws regarding sanctuary took place in 1014, when a fixed and definite scale of payment for violations of church peace was drawn up. All churches were not equally sacred in the eyes of the law, seemingly, because for violation of the peace of a chief minster or cathedral the penalty was to be five pounds, of a minster of the second class one hundred shillings, while only half that sum was exacted in the case of violation of an ordinary minster, and lowest of all stood the violation of a field church which was assessed at the small sum of thirty shillings. Anyone who committed murder within church walls was botless, and no compensation could redeem him from the consequence of his sacrilegious act, and he would be slain, unless he took sanctuary in so awful and sacred a place that his life would be granted to him by the king, on payment of the greatest possible legal fine both to God and to man. 10

⁹ Laws of Ethelred, VII, caps. 16, 17, 18, Thorpe, I, p. 333.

¹⁰ Laws of Ethelred, IX, anno MXIIII, Thorpe, 340 ff. Instead of five pounds fine by English law Canute's Laws give eight pounds, cf. Mazzinghi, Sanctuaries, p. 12.

Violations of sanctuary, however, do not seem to have occurred at all frequently during the Anglo-Saxon period. One case of wholesale violation of sanctuary is reported as occurring in 1004. In that year certain Danes took sanctuary in a monastery at Oxford to escape from English foemen. These latter were so enraged at this that they burnt down the monastery building which sheltered the fugitives, who perished in the flames. For this violation of sanctuary, restitution was later made in the most ample fashion. 11

The sanctuary legislation of the Danish king, Canute, is similar in substance to that of Ethelred the Unready, and so needs no special comment.¹² In the reign of Edward the Confessor no authentic legislation concerning sanctuary exists, as the so-called Laws of Edward the Confessor really belong to the twelfth century or later. Edward is said, however, to have granted sanctuary privileges to certain abbeys, the most important claimant for this honor being Westminster. But even the authenticity of the Westminster charter is questioned, and we cannot definitely attribute any sanctuary legislation to the reign of the Confessor.

Before bringing to a close this part, dealing with sanctuary during the Anglo-Saxon period, it might be well to say a few words concerning another practice of the time which was destined to become closely connected with sanctuary. This practice was that of outlawry, which, combined with the right of asylum, was in all probability the origin of abjuration of the realm. As sanctuary and abjuration were closely allied throughout the Plantagenet period, some notice of outlawry is necessary. Any man who in Anglo-Saxon times committed a grave offense or wrong and fled from punish-

¹¹ William of Malmesbury, De Gestis Pontificum, R. S., pp. 315-16, gives the story of this violation.

¹² Laws of Canute, II, 39, 41, pt. 1, 48 pt. 2, 66 pt. 1; in Schmid, *Die Gesetze der Angelsachsen*.

ment was generally proclaimed an outlaw. He became an outcast from society, beyond the pale of the law's protection, and his goods were forfeited to the king. Anyone could kill him with impunity, and his safest place of resort was beyond the seas. 18 Outlawry, therefore, was equivalent in most cases to exile or banishment. Some Saxon outlaws, it is true, took refuge in forests or lonely swamps and gathered other outcasts and criminals about them. Such bands would ravage the country around, until suppressed by force of arms and either slain, captured, or compelled to flee to another retreat. It will be easily seen that in outlawry the elements existed which went to make up the later oath of abjuration or foreswearing of the realm, administered to sanctuary-seekers who chose to avail themselves of it. This oath had, as we shall see, a similar effect in many ways as outlawry, for it made the swearer dead to the law and forced him into exile as a punishment for his misdeeds. There seems to be little doubt, therefore, that in Anglo-Saxon outlawry we have the germ and chief element of the later abjuratio regni.14 The mediaeval institutions of England adapted themselves readily to existing needs, and the combination of the Anglo-Saxon church frith with outlawry produced later, in the twelfth and thirteenth centuries, the more complicated system of sanctuary and abjuration, which became a part of the legal machinery of Anglo-Norman government.

The coming of the Normans to England, and the consequent transfer of power and possessions to their hands, wrought many changes in English institutions. Amongst other things it inaugurated a new stage in the development

¹³ Réville, Abjuratio regni, Revue Historique, Sept., 1892; Pollock and Maitland, History of English Law, I, 49. II, 590-91.

¹⁴Réville, *Abjuratio regni*, Rev. Historique, Sept., 1892, discusses this question very fully and shows excellent ground for outlawry being the chief basis of abjuration.

of the privilege or right of sanctuary. The record of institutional advance under the early Norman kings is, however, meager and unsatisfactory. Church asylum was no doubt a part of Norman law previous to 1066, and finding sanctuary established in England, also, the Norman kings recognized the institution in their laws. Although there is a scarcity of authentic legislation for the reign of William the Conqueror, we know that his policy was to confirm the existing laws and customs of his Saxon predecessors, which were known as the Laga Aedwardi. By so doing he hoped to conciliate the mass of the English people by keeping up the appearance at least of continuity with previous kings. It was not his policy to alienate a people whose support he needed against the powerful Norman nobles and great feudatories. In a set of Anglo-Norman laws, which some have attributed to William the Conqueror and which are known as the Leis Williame, but which probably belong to the twelfth century, though they may embody the spirit of earlier legislation, we find a law that carries on the spirit of Anglo-Saxon sanctuary legislation. It provides that anyone who removes a fugitive from an abbey or great church is to be fined one hundred shillings and is to restore the person of the fugitive to the church or abbey. Should the church be only a parish one, the fine was to be twenty shillings; if a chapel, only ten shillings was exacted. 15 This law reproduces, practically, the previous legislation of Ethelred and Canute, but it can hardly be considered as authentic. In the Statutes of William the Conqueror, given in the Textus Roffensis, no mention of sanctuary or sanctuary rights occurs, but the

¹⁶ Wilkins, Concilia, I, 313: "E si aucune meist main en celui ki la mere iglise requerist, si ceo fust u eveque u abeie u iglise de religiun, rendist ceo, qu'il aureit pris, e cent souz le forfeit; et de mere iglise de parosse, XX soux, e de chapele, X souz." Réville, Abjuratio regni, Rev. Hist. 1892, p. 11, quotes this law as if it were genuine. See Pollock and Maitland, Eng. Law, I, 102-3.

seventh chapter confirms the old laws and would, therefore, confirm previous sanctuary legislation. 16

The first William was a pious man in a practical way. In the year 1067 he founded Battle Abbey, near Hastings, on the field of Senlac. It was designed as a grateful memorial for his victory over the Saxons and was destined to be one of the greatest and wealthiest of Benedictine abbeys. The foundation charter of Battle Abbey is one of the most comprehensive documents of the time. Amongst the numerous privileges and immunities granted to the monks is that of affording full and complete sanctuary to fugitives and criminals: "If any thief or murderer or person guilty of other crime, fleeing for fear of death, should reach this church, then in nothing let him be punished, but, free in every way, let him be dismissed"—so ran the words of the charter.¹⁷

For the period of the later Norman kings there is no really authentic sanctuary legislation. That the privilege was well established we know from stories of sanctuary seeking found in the chroniclers of the time, and we can surmise that the institution, like other institutions and customs, was being changed and modified to suit the exigencies of Anglo-Norman law. In this connection it will perhaps be well to say a few words concerning the sanctuary clause in the so-called Leges Edwardi Confessoris. These laws, at one time supposed to belong to the early part of William the Conqueror's reign, have since been found to be a twelfth century compilation by some unknown Norman. The first division of this code relates to the powers and privileges of the church, and the fourth section, entitled "De reis ad ecclesiam fugientibus," relates to sanctuary privilege. Those in sanctuary are not to be removed save

¹⁶ Stubbs, Select Charters, pp. 83-84.

¹⁷ Camden, Brittania, London, 1600, p. 277, "Si quis latro vel homicida, vel aliquo crimine reus timore mortis fugiens ad hanc ecclesiam pervenerit, in nullo laedatur, sed, liber omnino, demittatur."

by the priest or his ministers. Fugitives who enter the house of the priest, or even the porch of it, are to be safe. No fugitive, however, is to retain stolen property; should he bring any such with him it must be restored to the owners thereof. In cases when a criminal resorts several times to the church or priest's house for protection, then he is finally, after restoring any stolen property, to forswear the province, and should he venture to return no one is to receive him unless by sanction of the king.¹⁸

In these last sentences we have, certainly, an early reference to abjuration in a limited form and under not very precise conditions, but yet it is clearly stated that sanctuary-seekers are to forswear the province. It is, therefore, a step towards the legal process, abjuratio regni, whereby in the thirteenth and later centuries the fugitive who had taken sanctuary abjured the realm.

Passing from the Norman period in which the information concerning sanctuary is meager and the legislation hardly authentic, we come to the long period of the Plantagenet kings. Immediately the sources of information become both more numerous and more reliable. We see the use of sanctuary spreading rapidly and the practice becoming a thoroughly national institution, respected by the law and by the people generally. The early Plantagenet kings were great founders of abbeys and priories, and many new chartered sanctuaries were added to those already existing, so that the number of peculiar or special sanctuaries increased greatly. This naturally gave rise to a distinction being drawn between the general sanctuaries and the peculiar, or specially chartered ones. English church law and common law, as well as the

¹⁸ Roger de Hoveden, R. S., II, p. 220, the part relating to abjuration is as follows: "Et si moro solito latro taliter egerit, et si forte fortuiter ad ecclesias vel ad sacerdoti frequenter evaserit, ablatione restituta, provinciam forisjuret."

custom of the country, had long recognized, and continued to recognize, every church, chapel or consecrated place as having protective rights over criminals fleeing to them. Usually, however, general sanctuaries only sheltered capital offenders who fled thither to save their lives and confessed to felony, after which they would abjure the realm. But on the other hand, royal charter, ecclesiastical privilege, or in some cases the frequent resort of offenders, gave special privileges to certain places as recognized peculiar sanctuaries. Such places could protect all classes of criminals, save those who escaped from the sheriff, or other royal officer, after having been delivered up for execution; even those who had committed high or petty treason were safe within the walls of most of the chartered sanctuaries.19 In many cases fugitives to these peculiar sanctuaries might remain there for life, though if they wished they could abjure the realm before the royal coroner.²⁰ Together with the increase in number of sanctuaries came a corresponding increase in the definiteness of legislation relating to them and to sanctuary privileges. In the Constitutions of Clarendon, Henry II. expressly provides that the chattels of those who are in forfeiture to the king and seek sanctuary are not to be kept in the church or churchyard, against the law of the realm. They belong to the king whether found without or within

¹⁹ The following list taken from Archaeologia, vol. VIII, p. 41 (article on Right of Asylum, by Rev. Samuel Pegge), includes all the most important chartered sanctuaries: Abingdon, Armethwaite (Cumberland) Beaulieu, Battle Abbey, Beverley Colchester, Derby, Durham, Dover (St. Martin's Priory), Hexham, Lancaster, St. Mary le Bow (London), St. Martin's le Grand (London), Merton Priory, Northampton, Norwich, Ripon, Ramsey, Wells, Westminster, Winchester, York. Thus there were at least twenty-two peculiar sanctuaries.

²⁰ Sanctuarium Dunelmense, Pref., pp. xviii, 30-31.

churches.²¹ Sanctuary privilege itself was recognized always, as regarded the life and limb of the individual. It was to harmonize this right of churches to afford personal protection with the right of the state to punish offenders that certain definite rules of procedure came into being.

We have already spoken in various places of the oath of abjuration of the realm as being associated with sanctuary in its developed form. The subject of abjuration, however, has been so ably treated already that it is hardly possible to throw new light on its origin and development.²² There is little reason or cause to doubt that abjuration of the realm developed from certain customs already existing, chief of which was outlawry. Now, taking this as the basis of abjuration, we can see how the custom developed by a gradual process of evolution. A fugitive would seek sanctuary where he would be safe from the secular arm. Some remedy was clearly needed for such a state of affairs, and the remedy chosen was to make him an official outlaw while sparing his life and person. Sanctuary-seekers were, therefore, required either to submit to trial or take an oath by which they abjured the realm forever. On the latter condition they were allowed to depart unharmed from the precincts of the sanctuary to take their journey into exile. The rational conclusion is, therefore, that abjuration of the realm was born of the old procedure of outlawry, in which the germs are to be found, and of the universal right of asylum common among all Christian nations. The English form of ecclesiastical immunity was an

²¹ Constitutions of Clarendon, cap. 14. "Catalla eorum qui sunt in forisfacto regis non detineat ecclesia vel cimiterium contra justitiam regis, quia ipsius regis sunt, sive in ecclesiis sive extra fuerint inventa." Stubbs, Select Charters, p. 140.

²² See the excellent and scholarly article by the late M. André Réville, Revue Historique, Sept. 1892, on the subject of L'abjuratio regni: histoire d'une institution anglaise.

adaptation to national institutions and needs, and abjuration of the realm became a peculiarly English institution. In so far as abjuration is to be found in Normandy we must consider it to have been derived from England, an insular institution transported to the continent and not a continental practice brought into the island by foreign invaders.²³

Abjuration of the realm is first definitely met with at the close of the twelfth century and beginning of the thirteenth, though it may have existed earlier. In a primitive form we have seen it mentioned in the Leges Edwardi Confessoris, which were probably compiled towards the close of Henry I.'s reign.24 There it is only the province that is to be forsworn, and no particulars of the process are given.25 Abjuration in its fully developed form is inseparably connected with the office of coroner. The origin of this office is somewhat obscure, though in recent years new and valuable light has been thrown on the question.26 Coroners probably existed in the time of Henry II. and perhaps as early as Henry I.'s reign. The office assumed definite shape, however, early in the thirteenth century. The duties of a coroner were those of a local administrative official. At first he was allowed to hold Crown Pleas, though later this right was withdrawn, and he took cognizance of all crimes committed in his district and held inquest on the bodies of slain men. In addition, he exercised important functions in connection with criminals and fugitives who had taken sanctuary and wished to abjure the realm. Associated with the coroner in his police duties were the men

²³ Revue Historique, Sept., '92, pp. 11-14.

²⁴ Pollock and Maitland, *Eng. Law*, I, 103-4. These laws have by some been attributed to Glanvil, but internal evidence alone would show that he was not their author.

²⁵ Roger de Hoveden, R. S., II., p. 220.

²⁶ Gross, Introduction to Select Cases from the Coroners' Rolls, Selden Society; also Political Science Quarterly, VII, no. 4, p. 662.

of the four neighboring vills. When a fugitive appeared and took sanctuary in any ordinary church, it was their duty to guard against his escape, should there be no pursuers. They were, also, to notify the coroner of the district who would then come and take the culprit's confession and enter his name and other particulars in his register. The Coroners' Rolls furnish a great deal of valuable evidence as to sanctuary-seekers. After making confession the criminal was allowed forty days of grace, at the expiration of which time he had either to abjure the realm or stand trial in the royal courts. The oath of abjuration, while not compulsory, was generally taken in preference to the alternative of coming under the heavy hand of justice. The oath of abjuration was taken before the coroner, and abjurers were allowed to depart unharmed. Clothed in a white robe, which bore the red cross of mercy, these unfortunate beings journeyed along the king's highway, turning neither to the left nor to the right, for fear of being slain, until at last, footsore and weary, they would reach the port of embarkation. There they took the first available ship across seas. Their oath of abjuration bound them never to set foot in England again, save by licence of the king; 27their property escheated to the crown and their chattels were forfeited. In later times the abjurer was branded with the letter A on the brawn of his thumb, as a mark and witness of his ignominy and punishment.28

Those who had taken sanctuary and would neither abjure nor surrender were usually starved into submission after the forty days of grace had elapsed. This resort to starving out

²⁷ Abjuration was sometimes pardoned and revoked. See one case in Mazzinghi, p. 34; on p. 44 Mazzinghi also cites a case in which a returned sanctuary man and abjurer is arrested.

²⁸ Réville, Abjuratio regni, Revue Historique, 1892, pp. 15-16, Gross, Select Cases from Coroners' Rolls, Introd.; Statute 4 Ed. I., and 21 Henry VIII., cap. 2.

sanctuary-seekers was sanctioned by the law but not by the Church. The English Church resented the interference of the civil power with its sanctuary privileges and immunities and it made repeated efforts to assert and establish the right of extending complete protection to fugitives who sought sanctuary. Any interference by seculars was in contravention to church liberties and privileges, and it was a frequent complaint at ecclesiastical councils that the immunity of the Church was not strictly observed. In 1257, on the occasion of a money grant to the king, the prelates and dignitaries of the Church presented to Henry III. a list of grievances which called for redress. One clause of this document related to the right of sanctuary. It stated that unfortunate fugitives within churches were so strictly besieged that food and drink could not be taken to them, and even clerks were debarred from ingress. In other cases fugitives were violently withdrawn from sanctuary or enticed out by promises and then taken and hung, or wickedly slain, and all this in contravention of the custom of the realm whereby, after forty days of grace, sanctuary-seekers were to be allowed to abjure and depart into exile.29

Sanctuary-seeking was exceedingly common in mediaeval England. Each year hundreds of offenders sought the protection of the Church. But the protection of the church could not always be relied on, and violations of sanctuary are numerous. According to the Church, all who took sanctuary were to be protected and sustained; according to the State, sanctuary-seekers were not to be allowed to escape, but must be closely watched and guarded. Church and State, therefore, were liable to come frequently into conflict.

²⁹ Matthew Paris, *Chronica Majora*, vol. VII, p. 357. "Aliquando fugitivus eripitur violenter, aliquando postquam secundum regni consuetudinem terram abjuravit—a publica strata positis insidiis extrahitur, suspenditur, et damnabiliter quando interficitur."

For a considerable period the sanctuary procedure developed in the eleventh, twelfth, and thirteenth centuries remained unchanged. Edward the First, in 1285, made special regulations for London as to the watch and ward of sanctuary-seekers. One hundred shillings was the fine imposed on those responsible for a criminal who had escaped from sanctuary. In connection with these regulations, numerous fines, inquiries, and pardons are met with in the London records.³⁰

In 1316 Edward II. enacted that abjurers, on their way to the port of embarkation, must not be molested and that sanctuaries were to be respected in that no fugitive to a church was to be slain unless found outside of sanctuary limits.³¹ It is doubtful, however, if this law wrought any change in the situation. Infractions of sanctuary still continued, and the clergy still kept up their complaints against encroachments on ecclesiastical immunity and hurled anathemas against the guilty persons.

Owing to the undue extension of the privilege of sanctuary it soon began to be a great abuse and a clog on justice in England. As early as 1278 Edward I. was forced to regulate sanctuary-seeking by statute, and the goods and property of fraudulent debtors who took sanctuary were declared answerable and could be seized.³² In the year 1378 the doctors and justices of both canon and civil law gave it as their opinion that sanctuary privilege should be curtailed and should properly extend only to cases of wrongdoing which, if punished by the law, would entail loss of life and limb.³³ Opposition

³⁰ Munimenta Gildehallae Lond., R. S., Liber Albus, pp. 86, 96, etc.

³¹ Statutes, 10 Ed. II., c. 7; Réville, Abjuratio regni, Rev. Hist., Sept., '92, p. 29.

³² Statutes of the Realm, I, 48, 6 Ed. III.

³⁸ Mazzinghi, Sanctuaries, p. 46; 3 Parl. Roll, 2 Rich. II., m. 51 a. "That neither in case of debt, account or single trespass was sanctuary demandable unless it involved injury to life and limb."

to sanctuary privilege was even more apparent in the four-teenth century. It was becoming a greater and greater hamper on justice and was freely claimed and utilized by debtors seeking to escape from their creditors, and by other fraudulent persons. Under Richard II. the temporal lords proposed that sanctuary privilege should be confined to great offenses involving life and limb and should not extend to debtors and other dishonest people.³⁴ They were not able to carry their point in regard to the great chartered sanctuaries, and during the fifteenth century debtors continued to receive shelter, particularly at such places as Durham and Beverley.³⁵ A compromise was, however, effected, whereby debtors who took sanctuary were enforced to swear that they did so with no dishonest motive, but in many cases this oath was either not exacted or was evaded.³⁶

In 1402 we find the Londoners accusing the college of St. Mary's le Grand with providing a refuge and sanctuary for bandits.³⁷ This began the war against privileged places of sanctuary resort, especially in the metropolis. In 1425, in 1429, in 1454, and finally in 1478, the Commons sought to modify and abridge the Church's right to afford sanctuary. At the same time efforts were made, in some cases successfully, to lessen the sanctuary privileges of some of the great abbeys.³⁸ The clergy defended church privilege with vigor, but it was a losing cause which they upheld. Yet for the moment any great changes in regard to sanctuary were staved off, nor is it probable that the Commons desired the practice

³⁴ Archaeologia, vol. VIII, pp. 32-33.

³⁵ Sanctuarium Dunelmense et Beverlacense, Surtees Soc., Introd, pp. xxv, xxvi.

³⁶ Archaeologia, vol. VIII, p. 33.

³⁷ Revue Historique, Sept. '92, p. 32.

³⁸ Mazzinghi, Sanctuaries, pp. 45, 46, 50; Reville, Revue Historique, Sept. '92, p. 32 ff. Both these writers have dealt fully with these efforts.

altogether abolished. They held rather that the institution was incompatible with the proper administration of the law and, therefore, wished to limit it as much as possible. In any case the Church was able to prevent any radical changes being made, and the close of the long period of the Plantagenet kings saw sanctuary and abjuration still flourishing in England.

The climax in the struggle between Church and State over the question of sanctuaries and sanctuary privileges came in the time of the early Tudors. The abuse and evil of unlimited protection of criminals could no longer be endured, and under the systematic and thorough rule of the Tudor kings many of the evils and abuses attendant on sanctuary seeking were remedied. The first measure of reform, however, emanated only indirectly from the crown. In 1467, at the request of King Henry VII., Pope Innocent VIII. granted a bull concerning abuse of sanctuary. This bull made several important changes in the existing order of things by declaring that any sanctuary-seeker who issued forth to commit further offenses against the law would forfeit his right to protection. Such a one could then be seized even within the precincts of sanctuary walls, should he have resorted thither. In the second place, the benefit of sanctuary was only to extend to protection of life and limb and not to personal property and belongings, while, thirdly, all persons accused or suspected of high treason who took sanctuary could be looked to by keepers, appointed by the king, so that they might not escape. This important bull, which did much to limit and restrict the privilege of sanctuary in England, was confirmed by the next Pope, Alexander VI., in 1493, and later by Julius II., in I 504.39

The sudden breaking up of religious privileges and immunities, especially in the case of the regulars, under Henry

⁵⁹ Rymer, Foedera, vols. XII, 541, XIII, 104.

VIII., did much to change sanctuary in England. Even before the dissolution of the monasteries the question was entered upon, and the existing practices altered and revised. By an Act of 1529-30, abjurers, immediately after confession and before taking the oath, "were to be branded by the coroner with a hot iron upon the brawn of the thumb of the right hand with the sign of the letter A." This was "to the intent that they might be better known among the king's subjects to have abjured." 40 The next year it was enacted, further, that on account of the strength of the realm being much diminished through the deportation of numerous sanctuary-seekers who each year abjured the realm, by this means lessening the population and further harming the country by instructing foreigners in archery and disclosing the secrets of the realm, therefore, persons who henceforward took an oath of abjuration were not to be allowed to leave the realm, but were to repair to some English sanctuary, chosen by themselves, and there live the rest of their days, unless pardoned by the king. Instead, therefore, of the old oath of abjuratio regni, formerly in use, a new one was substituted whereby the fugitive swore before the coroner to conform to these new conditions. If any sanctuary man, thereafter, left his place of retreat, unless by royal license and pardon, he was liable to be apprehended and tried for his original offense in the royal courts and was deprived of any further benefit of sanctuary.41 Such a statute as this marked a very definite effort at change and reform in the matter of sanctuary privilege and the procedure connected with it. Sanctuary-seekers were placed under the more direct control of the central power, and while they might enjoy sanctuary for a lifetime they would be kept as prisoners serving a life sentence. Even after this new and radical legislation,

^{40 21} Henry VIII., cap 2; Mazzinghi, Sanctuaries, p. 32.

⁴¹ Act of 22 Henry VIII., c. 14.

sanctuaries were an abuse and evil in England. Especially was this the case in the eyes of Henry VIII. and his advisors, when persons accused of high treason took sanctuary and so escaped punishment. Finally, by successive acts of legislation, in 1534 and 1536, all persons accused or suspected of high treason were debarred from the privilege or benefit of sanctuary.⁴² So far from being surprised at such legislation, however, we can only wonder that it is not met with sooner in English history. The fact that it is not, speaks for the power and privileges enjoyed by the clergy of the fifteenth and early sixteenth centuries, even when Roman influence and power were on the wane in England.

Another of Henry VIII.'s sanctuary laws put in force certain rules concerning sanctuary dress and equipment. All dwelling withing sanctuary limits were to wear a distinctive badge or mark on their upper garments. Such mark to be at least ten inches in length and the same in breadth and was to be assigned by the governor or head of the sanctuary. Failure to comply with this regulation involved the forfeiture of all sanctuary privileges. In addition, no sanctuary man was to carry a sword or other weapon, save a meat knife, and even that was only to be worn at meal time, and no one was to issue from his lodgings during the night, that is, after sunset and before sunrise. If this last rule were broken, the third offense would subject the breaker to loss of his sanctuary privileges.⁴³

The great break between Henry VIII. and the Papacy resulted in the dissolution of the English monasteries, and, naturally, the number of sanctuaries was generally decreased. The class of great chartered sanctuaries almost disappeared, for, by a statute of 1540, the privilege of sanctuary was taken away from all places formerly possessing it save parish churches

⁴² Acts of 26 Henry VIII., c. 13, and 28 Henry VIII., c. 7.

⁴³ Act of 37 Henry VIII., c. 19.

and churchyards, cathedral churches, hospitals, collegiate churches, and dedicated chapels, used as parish churches, and the sanctuaries at Wells, Westminster, Manchester, Northampton, York, Derby, and Launceston.⁴⁴ This reduced the number of sanctuaries by half.

When the Reformation became completely established in England, the abuse of sanctuary-seeking was lessened still more. Sanctuaries were no longer allowed to harbor murderers and other atrocious criminals. Nevertheless the custom continued, and fugitives from justice still sought an asylum in privileged places. An act of 1603-04 further regulated the practice, however, and finally, in 1624, it was enacted that no sanctuary or privilege of sanctuary should thereafter be admitted or allowed in any case.45 This statute put an end, practically, to all sanctuaries in England or sanctuary privilege. Certain privileges were still claimed in connection with the counties palatine of Durham and Chester, where the royal writs could not run, and in some of the less reputable districts of London, notably that known as Alsatia. In 1679, however, the writ of habeas corpus was declared in force in any county palatine or privileged place,46 and, in 1697 every so-called sanctuary was suppressed and sanctuary ceased to exist in England.47

⁴⁴³² Henry VIII., c. 12. Persons guilty of murder, rape, highway robbery, burglary, arson or sacrilege were excluded.

⁴⁵ I James I., c. 25, 21 James I., c. 28. Archaeologia, vol. VIII, p. 46.

^{46 31} Charles II., cap. 2, sect. 10.

⁴⁷ Act 8 & 9 Will. III., cap. 26.

CHAPTER II

SANCTUARY AND ABJURATION IN MEDIÆVAL LAW

The English law writers of the thirteenth and fourteenth centuries deal exhaustively and minutely with the procedure to be followed in cases of sanctuary and subsequent abjuration. Bracton has much to say of the matter in his work De Legibus Angliae, and his imitators and followers, the compilers of Fleta and Britton, deal almost as fully with the subject. The Mirror of Justices, that elaborate, but untrustworthy, work attributed to Andrew Horne, town clerk of London, and written probably in the time of Edward I., has much to say on sanctuary; much that is interesting, but which can hardly be relied on as exact.1 Then, too, the statutes of the realm, in Edward I.'s day, regulated sanctuary and abjuration, especially the interesting Tractatus de Officio Coronatoris of 1276, which contains valuable information. From these and other less important sources, too numerous to mention in detail, we can gain accurate and extensive information as to the legal customs and usages appertaining to sanctuary and abjuration.2

The crimes for which in the eyes of the law men could claim privilege of sanctuary were those, only, of a serious

¹As for example the statement: "King Henry II., at Clarendon, granted unto them (i. e., sanctuary-seekers) that they should be defended by the Church for the space of forty days, and ordained that the town should defend such flyers for the whole forty days, and send them to the coroner at the coroner's view." Cf. Sanct. Dunelmense, Pref., p. xx., Mazzinghi, Sanctuaries, p. 29.

²While seeking to give a clear and succinct account of sanctuary and abjuration in mediaeval law no attempt is here made to go exhaustively into the subject. In Coke's *Institutes*, pt. III, p. 115, a list of the numerous statutes relating to sanctuary and abjuration can be found.

nature. Murder, homicide, unpremeditated violence, or assault, such were the chief; debtors and fraudulent persons were not legally entitled to sanctuary privileges and immunities. Nor were common thieves, robbers and murderers, exiles, outlaws, or perjurers to be sheltered from the hand of the law, but could be removed without sacrilege. The privilege was designed for persons who by misfortune or mischance did some unpremeditated wrong and were not habitual criminals. Having once committed a serious offense the criminal's first thought would be how to escape from vengeance. The hue and cry would be raised and his nearest and safest refuge would be a church or other sacred edifice. A fugitive to sanctuary was not to be hindered or obstructed by neutral parties, provided he declared his intention of taking sanctuary. In most cases he had to reach the church itself before he was safe from pursuers, though in 1316 we find Edward II. making a law forbidding those who were guarding sanctuary-seekers from abiding in the churchyard, unless necessity, or danger of the fugitive escaping, compelled them to do so, and also providing that criminals who had taken refuge in churches should be allowed access to the churchyard as well.3 In the case of some of the great chartered sanctuaries, the immunity extended as far as a mile from the church.4

When the fugitive had reached the church he was watched and guarded by his pursuers or by the men of the four neighboring vills, part of whose duty it was to see that persons did not escape from sanctuary. The villagers were, also, to summon the coroner who would interview the fugitive and receive and register his confession. According to Britton, the confession and registration had to take place in the presence

³ Act of 10 Ed. III., Statutes of Realm, I., 173.

⁴ Sanct. Dunelmense, Surtees Soc., Pref., pp. xv, xvi, Mazzinghi, Sanctuaries, pp. 26-27.

⁵ Britton, pp. 17, 62; Pollock and Maitland, Eng. Law, I, 565, 566, II, 590.

of witnesses and of representatives from the four vills. In this he is not borne out, however, by Bracton and Fleta, who only speak of the confession and registration being made before the coroner or his deputy. ⁶

In most cases the coroner seems to have been prompt in appearing, when called on to parley with sanctuary-seekers. In some cases he would appear the day after the fugitive came to the church, but more frequently three or four days would elapse. The longest interval we have been able to discover on record was in the case of a certain William of Coventry, of the county of York, who took sanctuary on the ninth of December, 1348, and was interviewed by the coroner and called on to make confession on the twenty-first of the same month, an interval of twelve days. 7 This is an exceptional instance. The coroner on arriving at the church would question the criminal, demanding why he had taken sanctuary and whether he did not wish to put himself on the peace of the king. The following is a fourteenth century example of how these interviews took place: "And upon this Edmund Foster (the coroner) found the said John living in the aforesaid church and he inquired of the said John for what cause he held himself in the aforesaid church and whether he wished the peace of the Lord King or no."8

Once a criminal was safely lodged in sanctuary, the law allowed him forty days of grace. This period of forty days probably dated from the time that he took sanctuary, though one authority at least makes it date from the time of appearance

⁶ Bracton, R. S., vol. II, *De Corona*, cap. XVI, pp. 392-93; Fleta, cap. 29, *De Abjurationibus*.

⁷Réville, Revue Historique, Sept., 1892, p. 24, quotes this case from *Placita Coronae*, 22 Ed. III. Pollock and Maitland, *Eng. Law*, I, 566, cite a case, however, in which the coroner refuses to appear unless paid a mark and the township has to watch the church forty days.

⁸ Coram Rege Roll, 8 Rich. II., quoted by Réville, Revue Historique. Sept., '92, p. 25.

of the coroner.9 Should he wish to do so, the fugitive could take the oath of abjuration before the forty days had run their course, but he had to decide one way or the other at the end of forty days, either to abjure the realm or stand his trial.¹⁰ Innumerable cases of abjuration of the realm occur in the English records and furnish reliable evidence as to the procedure followed. The oath to abjure the realm—abjuratio regni—was never compulsory on fugitives to sanctuary, but was generally taken by criminals in preference to submission to royal justice and trial courts. By abjuring the realm the criminal would escape with life and limb, although thenceforth an exile and outlaw as regarded England.

For the purpose of administering the oath, the coroner had again to be called in. Kneeling before this officer of the law, at the door of the church, the abjurer solemnly swore to leave the realm of England and never to return save by license of the king or his heirs. The exact form of the oath can not be exactly determined, as it seems to have varied according to the age and, perhaps, according to the place where it was taken. The following oath taken from Bracton's work is probably as good an example as any that can be found:

"Hoc audite justitiarii vel o vos coronatores exilio ab regno Angliae et illuc iterum non revertar nisi de licentia domini regis vel haeredum suorum, sic me Deus adjuvet." ¹¹

⁹ Bracton, vol. II, 393; Fleta, cap. 29, p. 45. Britton has "Et s'il demeurent outre les XL jours de cel houre qe le coronner vient a eux premerement," p. 63.

 $^{10}\,\rm Bracton,~II,~393;~Mazzinghi,~p.~37,~gives~a~case~in~which~the~fugitive~goes~on~the~King's~Peace~and~stands~his~trial.$

¹¹ Bracton, De Legibus Angliae, vol. II, p. 393. The form given by Britton, perhaps a slightly later version, has an additional phrase in it; that given in the Statutes of the Realm, I, 250, differs materially as regards language and is probably later still. In taking this oath before the coroner the abjurer was, according to most authorities, to appear clothed in sackcloth. See Mazzinghi, Sanctuaries, p. 30.

Later on, the oath of abjuration appears to have become much fuller and longer on account of the criminal swearing to perform certain things formerly given him as directions by the coroner.¹²

In connection with the administering of the oath of abjuration, an interesting point of procedure has been raised in regard to fugitives who had fled to another county, and especially a county palatine, and taken refuge there.¹³ By whom, in such a case, was the oath of abjuration to be administered? Was the would-be abjurer to be transferred from where he had taken refuge to the county from which he hailed, or where the crime had taken place, or was he to take the oath of abjuration from the local coroner? Cases of sanctuary-seekers from other counties are several times met with in the records, but few if any of these are reported as abjuring.14 In the majority of cases, however, criminals would flee to the nearest sanctuary, which would in all probability be in the same county and therefore abjure before the local coroner. Should men from other counties take sanctuary, they would probably be treated as ordinary fugitives, and if they wished to abjure they would do so before the local coroner. But the evidence that we possess is so scanty that no definite rule of procedure can

¹² See, for example, Sanctuarium Dunelmense, Pref., p. xvii, xix, where an oath of confession and abjuration is given, taken from Rastall, Statutes, Art. Abjuration, sec. 4. Rastall was chief justice of Common Pleas in the reign of Queen Mary. The oath he gives belongs to the reign of a King Edward, probably it is Edward IV., as abjuration of the realm was done away with in the case of sanctuary-seekers by statute, 22 Henry VIII., c. 14.

¹⁸ Lapsley, The County Palatine of Durham, pp. 255-54, discusses this question in connection with sanctuary and abjuration in Durham.

¹⁴ Sanctuarium Dunelmense et Beverlacense, Surtees Society, contains many examples of extrinseci taking sanctuary; cf. Lapsley, Palatinate of Durham, p. 254.

be laid down. But by a statute of 1512 it is provided that taking sanctuary in another county involves process of trial in the county where the indictment lay.¹⁵ This act seems to indicate some existing diversity of opinion concerning the procedure in regard to sanctuary-seekers who were forinseci or extrinseci.

The sanctuary-seeker having once taken the oath became an abjurer and had to leave England as quickly as possible. The port at which he was to embark, the road by which he was to travel, and the time to be allowed for the journey, had all to be decided before he could depart. Concerning the choice of the port for embarkation, some difference of procedure apparently existed. The law writers, without exception, state that the abjurer could choose his own port, while on the other hand, the statutes and the year books tell us that it was the coroner's duty to assign the port. 16 As this latter view is of later date, it is easily supposable that the custom changed somewhat during the last part of Henry III.s reign. In fact, recorded cases of abjuration of the realm show this change at work. Thus a certain unknown man who had taken sanctuary in the church of Southoe in 1267, "abjured the realm before the coroner of the county of Huntingdon, electing for himself the port of Dover." 17 A few years later, in 1276, we find John, son of William of Westfield, abjuring the realm, "and the port of Dover was assigned to him" by the coroner.18 The main part of Bracton's work on the laws of England seems, in all probability, to have been written between 1251 and 1258, and in it therefore, we have the older usage given. Britton and Fleta follow Bracton as does the Mirror of Justices.

 ¹⁵ Act of 4 Henry VIII., cap. 2, sec. 2, Statutes of Realm, III, 49, 332.
 ¹⁶ Bracton, II, 193; Fleta, 45; Britton, p. 64; Statutes of the Realm, I, 59, 250; Year Book, 30 Ed. I., R. S., p. 509.

¹⁷ Select Cases from the Coroners' Rolls, ed. Gross, Selden Society, I, 67. ¹⁵ Ibid., p. 75.

The Statutes of the Realm and the Year Book for 1301-02, give the newer and later custom. It is interesting to note in this connection that the *Statutum Walliae*, which was a set of police and governmental regulations for Wales drawn up under Edward I., after the conquest of Wales, expressly provided that the coroner should assign the port to the abjurer. This became the legal rule, therefore, though in practice the abjurer was frequently allowed to make choice of his port, and the coroner would then assign it to him. Should the abjurer desire to go to Scotland, rather than across seas, a border town or village took the place of the port of embarkation, and he was directed by the coroner to pass through the place assigned.²⁰

Before leaving on their pilgrimage of exile, abjurers were given directions as to the road they must follow, and a specified time, depending on the distance to be traversed, was set for their journey. Finally they were given a few words of warning and direction, as to their conduct *en route*, by the coroner. No abjurer was ever to leave the king's highway nor remain more than two nights in any one place; he must attend solely to his own business while on the journey, take the most direct route to the port and embark there as soon as possible within the allotted time. If no ship could be found by which he might cross the seas, then he was to take sanctuary again and await a more favorable time.²¹

If a sanctuary-seeker who wished to abjure took the oath before his forty days of grace had expired, he was not obliged

¹⁹ Statutes of the Realm, I, 59. For sanctuary and abjuration in Wales, see Mazzinghi, Sanctuaries, pp. 55-56.

²⁰ Bracton, II, 393-94, Réville, Rev. Historique, '92, pp. 15 ff.

²¹ Bracton, II, 393-94; Fleta, 45. Chapter 29 of Fleta contains, perhaps, the best account of Abjuration. In the Palatinate of Durham abjurers were transferred from constable to constable until they reached the port assigned them; see in Sanctuarium Dunelmense, pp. 30-31.

to depart at once, but could remain until the end of the period allowed by law. Then, however, if having abjured he refused to depart, or if he had declined to take the oath, as was sometimes the case, and refused to surrender, he was liable to be tried and punished for his wrongdoing. Bracton lays down the law on this point very explicitly, but says that such a one must not be dragged out forcibly from the sanctuary, for that would be sacrilege. He goes on to say, however, "the ordinary of the place, such as the archdeacon or his official, the dean or the priest, may do this, and ought to compel him to go forth, for the sword ought to assist the sword and the execution of the law works no injury, and when such a person will not go forth unless compelled, there is a vehement presumption against him that he is an evildoer, and to maintain him in the church will be nothing else than to act against the peace." 22

In spite of Bracton's judicial reasoning, the ordinary, or other clerical head, seems to have been unwilling in most cases to force criminals from sanctuary. Cases of criminals being delivered over to the hand of the law after having taken sanctuary are exceedingly rare. If the ecclesiastical power would not hand over the criminal, then the only way to get him out of sanctuary was either to commit sacrilege and forcibly remove him, or by cutting off all the food supply to force him to surrender or, as was now and again done, to set fire to the church or other sanctuary and compel him either to perish in the flames or surrender.²³ Sometimes, also, fugitives were enticed out by false promises of pardon or escape and taken or slain by their foes. Instances of all these various infringements

²² Bracton, De Legibus Angliae, R. S., II, 397.

²² Setting fire to the church seems only to have been tried as a last resort when all other measures had failed. It was a practice of doubtful recourse.

of sanctuary privilege are met with in mediaeval annals. According to Britton, all fugitives who abode in sanctuary after the forty days had elapsed were debarred thereafter from the favor of abjuration and deemed as felons convict. Laymen, under penalty of forfeiture of life and limb, and clerks, under pain of banishment from the realm, were forbidden to give them meat or drink or to have any communication with them. In this matter Britton is borne out by Fleta, who lays down the law to practically the same effect.²⁴

Under these circumstances most sanctuary-seekers were wise enough to take the oath of abjuration. This though itself a penalty and a punishment, saved life or limb which else might have been forfeited to the law. Once a criminal had taken the oath there could be no drawing back; it was compulsory for him to leave the realm. On his dismissal by the coroner the abjurer started forth on his journey armed only with a wooden cross. He went bareheaded and was clothed in a long white robe which rendered him conspicuous among mediaeval wayfarers. All persons were prohibited from molesting abjurers while on their journey, as long as these remained on the king's highway. The men of the four nearest vills were to see that abjurers passed unmolested and unharmed and were to take vengeance in case any enemies interfered or used violence.25 In 1267 we have record of the case of a certain unknown man who had abjured the realm at Sudbury, in Bedfordshire, and was on his way to Dover when attacked and slain on the highway. The hue and cry was immediately raised after the murderers, from township to township, and their apprehension and arrest ordered, while the coroner, who was summoned to the scene, held an inquest on

²⁴ Britton, I, 65; Fleta, cap. xxix, p. 45.

²⁵ Fleta, cap. xxix. De Abjurationibus, is especially full of detail. Britton, I, 64; Bracton, II, 393; Statutes of the Realm, I, 59.

the body of the slain man, with the help of the men from the four nearest vills.²⁶ If the fugitive had been slain while seeking to escape and had been off the highway the case would have been very different, and the men of the four vills, or enemies of the abjurer, who might be lying in wait for such an occurrence, would be perfectly justified in pursuing him, and either capturing him or taking his life.²⁷ In 1276, such a case in fact does occur. A certain John, son of William of Westfield, of whom we have already heard as an abjurer, was on his way to Dover and fled from the highway and sought to escape. He was pursued and captured by the villagers and on the hue and suit of the whole township was beheaded.²⁸ Such was almost certain to be the fate of any abjurer who sought to escape while on his way to the port.

Upon arrival at the assigned port the abjurer was to embark as soon as possible. If no ship was there, ready to sail, or if the wind or weather were adverse, he was to wade into the water each day until it came above his knees,²⁹ as a witness of his desire and willingness to fulfill his oath and cross the sea. During the time of waiting to embark, the beach was to be his resting place, but should he be unable to get passage within the time allotted, he was allowed to travel safely back to the sanctuary from which he had come, still carrying his cross and wearing the white robe. There he would await a more favorable time and opportunity to embark. Thus abjurers were well guarded and protected from violence, even after the time allotted them to depart from the realm had expired.

Then as now the port of Dover was the great place of embarkation for the continent, and so, as most of the abjurers

²⁶ Select Cases from the Coroners' Rolls, Selden Society, vol. I, p. 9.

²⁷ Fleta, p. 45; Britton, I, 64.

²⁸ Select Cases from Coroners' Rolls, I, 37.

²⁹ Fleta, De Abjurationibus, p. 45, says "usque ad collum," however.

elected to cross to France, Dover was generally assigned to them. The time allowed for a journey to Dover varied with the distance to be traversed, but in no case does it ever seem to have been long. In the time of Edward III. only nine days were allowed a criminal to go on foot from Yorkshire to Dover, as we learn from the case of William of Coventry who, in 1348, took sanctuary in the church at Thwing, and after confessing to various robberies, abjured the realm, "and nine days were given to him to reach the port of Dover in order to be carried over the sea." 30

There were certain classes of criminals and fugitives to whom the privilege of abjuration was absolutely refused. No one who had already been tried and sentenced, and had then escaped to sanctuary, could take the oath of abjuration, unless by special favor, but had to undergo punishment.³¹ This prohibition was rarely revoked, and the case of a woman, in the time of Edward III., who, after being condemned to death for robbery, managed to escape and take sanctuary and was then allowed to abjure, is an exceptional and unique one.32 Other classes of criminals to whom abjuration was not possible were those guilty of high treason and misdemeanor, those who had been outlawed, or those who having once abjured had escaped and wished to abjure again, to be allowed to escape the vengeance of the law. Such persons had to submit themselves to the law whether found within or without sanctuary walls.33 Neither sanctuary nor abjuration could be claimed by those unhappy persons who had committed murder or homicide within the sacred precincts of a church or other consecrated

³⁰ Pike, History of Crime, I, 232, quotes this case from the Placita Coronae, 22 Ed. III.

³¹ Bracton, II, 395, deals with this point fully.

³² Revue Historique, Sept., '92, p. 26. Réville notes this case particularly and quotes from Fitzherbert's *Chronicle*.

³⁸ Bracton, II, 395; Revue Historique, Sept., 1892, pp. 20 ff.

place. Thus in 1366 a woman who had slain a clerk in a London sanctuary, and then claimed right of protection in the place, was compelled by order of the bishop of London to leave the sanctuary. She was arrested and three days later was hung for her crime.³⁴

Clerks, or members of the clergy, were another class who were not allowed to abjure. Instead, when they had taken sanctuary, they were handed over to the ecclesiastical courts to be punished for spiritual offenses, or to the secular courts if they had committed offenses amenable to common law. By claiming benefit of clergy they could always escape the worst consequences of their crimes. In 1257 we find the prelates of England, in their Articuli, presented to Henry III., complaining that he forced clerks to abjure. The king in response promised to remedy this abuse and to render all clerks to their proper judges.35 Some years later, in 1286, we find the Bishop of Lincoln writing to Edward I. requesting that a certain Richard of Scarborough, a priest, who, being accused of robbery, had taken sanctuary and wished to abjure, and so escape the consequences of his crime, might be seized and handed over to the church for punishment.36

The oath of abjuration entailed severe civil disabilities on those taking it, for abjurers became, to all intents and purposes, outlaws. Their goods and chattels were forfeited to the crown and their lands escheated to the lord from whom they were held. The Parliament Rolls of Edward I.'s time give three forms of letters of escheat, because a man was outlawed, or was hung, or because he abjured—"quia utlagatus, vel sus-

³⁴ Croniques de London, Camden Soc., p. 142.

³ Matthew Paris, Chronica Majora, vol. VI, 355-56; Revue Historique, Sept., '92, p. 20.

³⁶ Rev. Hist. (1892), p. 20, quoting from Rot. Clausarum, 14 Ed. I.; see Prynne. Records, vol. III, 355.

bensus, vel quia abjuravit." 37 If, however, any person abjured the realm through fear of being punished for a felony of which he was not guilty, but which he thought better to confess and abjure for, and if afterwards it were proved that he had not committed the aforesaid felony, then, according to Britton, the abjuration would be rendered null and he might return in safety to England. Nor were the heirs of such a person to be disinherited, though the goods and chattels of the abjurer would necessarily be forfeited to the crown by reason of their owner's flight and abjuration. In like case, if abjuration were made on account of trespass on royal game or other preserves, no one was to be disinherited of his lands or tenements, but forfeiture of goods and chattels took place.38 All abjurers took a solemn oath never to return to England save by license of the king or of his heirs and in case any abjurer ventured to return he laid himself open to capital punishment.39

The procedure in regard to sanctuary and abjuration which has been outlined in this chapter was that in general use in the thirteenth, fourteenth, and fifteenth centuries, and in fact down into Tudor times.⁴⁰ Under Henry VII. and Henry VIII., however, various changes and modifications in regard to sanctuary and abjuration of the realm took place, and the latter king abolished the practice of abjuring the realm and substituted that of confining fugitives in well-recognized and guarded sanctuary places. One of the last and most curious uses the oath of abjuration was put to was, when, in the reign

³⁷ Rotuli Parl., vol. I, p. 52 b.; see, also, Revue Historique (Sept. 1892), p. 18.

³⁸ Britton, pp. 65-66, also, Bracton, Fleta, and Statutes of Realm, as already quoted.

⁸⁹ Bracton, vol. II, 395.

⁴⁰The following case occurs as late as 1524: "John Brewer killed Will Bull at Castle Combe with a sword, and then ran to the church. He spoke with the coroner and abjured the realm." Mazzinghi, pp. 69-70.

of Elizabeth. Roman Catholics and Protestant dissenters, who might be convicted of having refused to attend the divine service of the church of England, were required to abjure the realm in open court. If they refused to take the oath of abjuration, or, if, having abjured, they ventured to return, they were to be adjudged felons and to suffer death without benefit of clergy.⁴¹ Later, by the Toleration Act, Protestant dissenters were exempted from this somewhat barbarous provision, but it was not until 1791 that Roman Catholics, convicted of recusancy, ceased to be liable to be called on to abjure.⁴²

Abjuration in connection with sanctuary had practically disappeared by the year 1625, but all vestiges of it which remained were swept away by the Act of James I. of that year, by which all privilege of sanctuary and abjuration consequent upon it was abolished and done away with.⁴³

Another peculiar thing in connection with sanctuary procedure in London is that, during the thirteenth and fourteenth centuries, the citizens

⁴¹ Act of 35 Eliz., cap. 1, Statutes of Realm, vol. IV.

⁴² Act of 31 Geo. III., see Statutes of Realm, III.

⁴³ Sanctuary and Abjuration in the City of London: The usages in regard to sanctuary and abjuration in the city of London differed from those in the realm at large. As soon as a criminal had taken sanctuary in any London church it was the duty of the watch and ward to see that he did not escape. If the watch proved negligent, and the criminal escaped, the penalty was a fine of one hundred shillings. Exactly who the responsible persons were, however, was in the thirteenth and fourteenth centuries a matter of dispute between the citizens of London and the king's justices. In 1295-96, 24 Ed., I., we find the sheriffs of London held responsible for the escape of certain murderers from sanctuary, and they are fined accordingly. (Liber Albus, R. S., pp. 101, 281.) This responsibility seems to have been repudiated by the sheriffs, for in the next reign the justices are found giving their opinion that the sheriffs and citizens of London are wrong in alleging that they are not responsible for escapes from sanctuary, while, in 1321, Edward II. grants a pardon to the city for neglecting to keep watch over those who have fled to the city churches for sanctuary. (Liber Custumarum, R. S., 376-77.)

did not have the right of electing their own coroner. No coroner, properly speaking, existed for London. Instead it seems to have the practice for the chamberlain of the city and the sheriffs, sometimes assisted by the aldermen, to exercise the coroner's functions. (Gross, Coroners' Rolls, Introd., p. xxiii.) Thus as early as the year 1228 we find the oath of abjuration taken by a sanctuary-seeker before the civic chamberlain and the sheriffs. (Liber Albus, p. 86.) This practice seems to have continued throughout the thirteenth and into the fourteenth centuries. It was decided, however, as early as 1232, 18 Henry III., that in case the chamberlain were absent the oath could be taken before the constable of the Tower of London and the sheriffs and aldermen of the city. (Liber Albus, p. 96.)

In these particulars, therefore, London stands by itself as an example of peculiar procedure as to sanctuary and abjuration.

CHAPTER III

THE CHARTERED SANCTUARIES

The chartered sanctuaries of England formed a class by themselves. In connection with many of them, peculiar customs and usages existed which are not to be found in use elsewhere. As a rule the sanctuary jurisdiction of these specially privileged places was more extensive and their procedure more formal than in the case of the ordinary church or chapel. At Ripon, at Beverley, and at Hexham the sanctuary limits extended at least a mile on every side of the sacred edifice. The boundaries of the church frith were marked in most cases by stone crosses erected by the side of the highways leading into the town.1 These showed the fugitive that he had reached a place of safety and warned his pursuers not to trespass farther. Gradations of fine, increasing with the proximity to the altar, were generally in force. At Beverley the distance from the outer limits to the altar was divided into seven sections, the penalty being made, in proportion, to increase from eight pounds for violation within the first limit up to one hundred and forty-four pounds for the sixth, while to violate the seventh of the divisions was to commit a hotless or unremissible offense and entailed death on the offender.2 At Hexham a similar gradation of penalties was in force, and at both of these great sanctuaries the most sacred and holy refuge was the frith stol or chair of peace. The frith stol probably existed in many of the English sanctuaries, for in name and use it was inseparably

¹ Sanctuarium Dunelmense et Beverlacense, p. 99. Archaeologia, vol. VIII, p. 25.

² Sanctuarium Dunelmense et Beverlacense, p. 100.

connected with the right to afford protection to fugitives. The church at Hexham still possesses an ancient Norman frith stol.³ This chair, usually of carven stone, stood beside the high altar and like the fertre or shrine, containing the relics deposited behind the altar, it insured complete and absolute protection to the sanctuary-seeker. Anyone who violated the sacred precincts of the altar committed an unpardonable offense, one for which no money payment could atone. The frith stol at Beverley, in Yorkshire, bore the following inscription, carved in Roman capitals, to signify its use:

HAEC SEDES LAPIDEA FREED STOOLE DICITUR, I. E. PACIS CATHEDRA AD QUAM REUS FUGIENDO PERVENIENS OMNIMODAM HABET SECURITATEM. 4

Even to-day, in various parts of England, curious stone crosses inscribed with the word SANCTUARIUM are to be met with. Such crosses probably marked the way to a sanctuary and served to guide fugitives.⁵ An interesting record of the middle of the fifteenth century gives us the limits prescribed by the Bishop of Worcester for the cathedral sanctuary there. These limits were to extend, "from the great door of the cathedral charnel house, by the great stone wall of our palace to the great gate of the said palace," and then to continue through the whole circuit of the place.⁶

On arriving at a chartered sanctuary the seeker for protection had, in most cases, to go through certain formalities of admission. Usually he had to make confession of his crime to one of the sanctuary officials, in some cases to the royal

³ Ibid., Pref., x, where a woodcut of the Hexham frith stol is given.

⁴ Sanct., Dun. et Bev., Pref. xiv.

⁵ Mazzinghi, Sanctuaries, p. 23-24; Sanct., Dun. et Bev., Pref., xv. For the cross belonging to the Benedictine nunnery of Armethwaite, see Hutchinson, Hist. of Cumberland, I., 192.

⁶ From a document dated 1460, quoted by Mazzinghi, Sanctuaries, p. 25.

coroner, to surrender all his arms, and place himself under the supervision of the religious head of the place, bishop, abbot, or prior. He then swore to observe the rules and regulations governing those dwelling in sanctuary, and a small fine or admission fee was paid to one or other of the sanctuary officials of the church or convent. His name, domicile, occupation, confession of crime, the instrument used, the name of the victim, or victims, and other particulars, were registered in the church or sanctuary register, kept for that purpose. Several of these registers have been published, others are still in manuscript, and they form our most valuable sources of information on the procedure in use in the English charter sanctuaries.

The rules and the formalities in force at various sanctuaries often differed greatly, but the following interesting extract from the Beverley Register gives a very fair idea of the general method of procedure on the admission of a fugitive:

The Bailiff (i. e., the Bailiff of the Liberty of St. John of Beverley) should receive the oath of those seeking the liberty of Saint John of Beverley. Then the clerk of the court (curiae) should write and set down their names in the book of the court, questioning each one as follows:

"What man he killed and wher with, and both their names, and then gar him lay his hand upon the booke, saying in this wise: Sir, take heede on your oth—Ye shalbe trew and feythfull to my Lord Archbisshop of Yorke, Lorde of this towne, to the Provost of the same to the Chanons of this Church, and all other ministers thereof.

"Also ye shall bere gude hert to the Baillie and XII governors of this town, to all burges and comyners of the same.

"Also ye shall bere no poynted wepen, dagger, knyfe, ne none other wepen, ayenst the Kynges peace.

"Also ye shalbe redy at all your power, if there by any debate or stryf, or oder sothan (sudden) case of fyre within the town to help to surcess it.

"Also ye shalbe redy at the obite of Kyng Adelstan, at the Dirige, and the Messe, at such time as it is done at the warnyng of the belman of the towne, and do your dewte in rynging and for to offer at the messe on the morne. So help you God and thies holy Evangelistes." And then gar him kiss the book.

And under these circumstances the bailiff or his deputy should receive from each petitioner for the aforesaid liberty a fee, viz., ij s. iiij d. and the clerk of the court or his deputy should receive a fee, for inscribing the same in the book, viz., iiij d.⁷

In the Beverley register the description or occupation of the sanctuary-seeker, his residence, and the place and mode of his crime were regularly entered.

Having once been admitted into a sanctuary, fugitives were, as a rule, remarkably well treated. At Beverley and at Durham, in particular, was this the case. In some instances, as at Beverley, Beaulieu, and Westminster, sanctuary-seekers of noble or high birth were given special attention and lodged in the dormitory or in some house within the refectory court.⁸ Even the ordinary sanctuary-seeker, at Beverley at least, was well received, and was lodged and fed for thirty days. Meals were served in the refectory, and the fugitive entered fully into the life of the place. If the canons could not make peace between the sanctuary-seeker and his pursuers inside of thirty days, then he was safely conducted,

⁷ Sanctuarium Dun. et Bev., p. iii, for the original draft of this process and oath which is partly in Latin and partly in English.

⁸ Mazzinghi, Sanctuaries, p. 27; Sanct. Dun. et Bev., Pref., and pp. 100-101. Some churches seem to have had rooms over the door or porch for the lodgement of sanctuary-seekers.

by land or by water, to the borders of the county of York and then allowed to seek safety in fresh flight. If anyone came a second time for protection he was to be received and treated as before. But if for a third time he fled for his life to the church, then he was to become a perpetual servant of the church, because his life and limbs had for the third and last time been preserved to him.9 The Beverley register does not contain the names of any sanctuary-seeker who by thrice resorting thither became servants of the church community of St. John.¹⁰ This does not imply, however, that no one ever did so. The fact that some criminals saved their lives by donning the religious habit seems to be proved to have been the case in other parts of England if we are to judge from a letter of Archbishop Peckham, of Canterbury, in which he says: "For to the crown belongs not only cruelty and rigor of justice, but still more pity and mercy. By which the Holy Church, by the King's will, saves evildoers by sanctuary of the church, by orders and by the religious habit, as appears in the North Country where murderers, after their crime, betake themselves to the great abbeys of the Cistercians and are safe." 11

The sanctuary afforded by the shrine of St. Cuthbert, in the cathedral church at Durham, was frequently taken advantage of, and the dying words of the aged saint that criminals of every

⁹ Sanctuarium Dun. et Bev., pp. 100-101; Mazzinghi, Sanctuaries, pp. 27-28.

¹⁰ The following interesting note is taken from Mazzinghi, Sanctuaries, p. 89: "Baron de Maseres, Archaeologia, vol. II, p. 313, thought we might in part refer the origin of slavery in England to the institution of sanctuaries. He supported his view by the charter of an early Saxon king to Croyland, which entitled the abbots to take as slaves all who fied to sanctuary there." The charter to Croyland is, however, a forgery.

¹¹ Letter of Archbishop Peckham to Robert Malet, Registrum Epistolarum Johannis Peckham, R. S., III, 995.

sort would flock to his shrine proved true. Durham became one of the most popular places for fugitives to seek refuge at, and with Beverley and Hexham made up the group of three great northern sanctuaries. The city was the capital of the Palatinate, but the protection afforded by the sanctuary was not confined to natives of the county, for persons from every part of England could repair thither and rely on the immunities of the place to protect and save them.¹² These fugitives were almost as well provided for as at Beverley, after somewhat similar formalities as to admission had been complied with. All persons seeking sanctuary were to apply for admission at the north door of the church, which bore the famous sanctuary knocker, and above which were two small chambers where the gate-keepers slept in order to admit sanctuary-seekers at any hour of the night. When anyone was admitted the bell in the Galilee, or outer chapel, tolled forth the news that a fugitive had arrived. Bell-ringing, in fact, played an important part at Durham as, up to 1503 at least, the sanctuary-seeker had himself later to toll another bell as a formal sign or token that he prayed sanctuary. Before this, however, he was required to declare in the presence of witnesses the nature of his offense with other details which, with his name and place of residence, were entered in the register. The entry of the declarations of the sanctuary-seekers at Durham is fuller than at Beverley. In many if not in most of the cases these declarations were made before the chancellor of the cathedral, who seems to have been the proper person to receive them, though in his absence the sub-prior, or some one of the clergy, could act. The culprit having confessed his crime with all details as to names, places,

¹² Sanctuarium Dunelmense, Surtees Society, Pref.; Lapsley, County Palatine of Durham, pp. 253-54. "Free access to the shrine was regarded by the people of the bishopric as a valuable right, and was included in the charter of liberties which they obtained from Bishop Bek." See Registrum Dunelm., R. S., III., 64.

instruments, and so on, and the entry having been made, he was admitted to privilege of sanctuary, after tolling the bell as related above. Orders were issued by the prior to provide him with a gown of black cloth, on the left shoulder of which was St. Cuthbert's cross, in form like that of St. Andrew, in yellow. He was lodged over the south door of the Galilee where he had a graete or bedstead allotted him and for thirty-seven days he was fed and maintained by the church authorities. When this period had elapsed it is not clearly stated what would happen. In all probability, if the sanctuary-seeker felt it unsafe to venture forth, the coroner of the Bishop of Durham would be called in and the fugitive would confess and abjure the realm. The following case, the only one of its kind recorded, gives one a good idea of the procedure:

"Memorandum; that on the 13th day of May, A. D. 1497, one Colson of Walsingham, Durham, detected in theft and by reason of this same theft taken and thrown into prison and there detained, finally escaped from prison and fled to the cathedral church of Durham on account of the immunity there existing, and whilst he stood there, close to the shrine of St. Cuthbert, he asked to have a coroner assigned to him. To whom, indeed came John Raket, coroner of the Ward of Chester in Strata (sic), and to him the same Colson confessed the felony, and by corporeal oath swore to leave the realm of England with as much despatch as possible and never to return."

This oath he took at the shrine of St. Cuthbert in the presence of several witnesses amongst whom is mentioned the

¹³ Sanctuarium Dunelmense, Pref., p. xvi, and cases given by Mazzinghi, Sanctuaries, p. 28.

¹⁴ Sanctuarium Dunelmense, Pref., xvi-xvii; Lapsley, County Palatine of Durham, p. 253.

sacristan of the church. By reason of his oath of abjuration all Colson's personal belongings seem to have been forfeited to the said sacristan and his office, so that the said Colson was commanded to strip himself of all his garments—usque ad camisiam—"even to the shirt," and to deliver them to the aforesaid sacristan. This was a mere formality, however, as when that official had received the garments in full possession he gave back and freely remitted to the abjurer all his clothes and belongings. After this ceremony, Colson left the church and was delivered by the sheriff to the nearest constable, and then transferred from constable to constable until he reached the port of embarkation. All the time he carried in his hand a white wooden cross, as a fugitive and abjurer. He was always to be sent forward in this strange pilgrimage, and on reaching the port was to take ship and never return.¹⁵

In another part of this essay a list has been given of most of the great English chartered sanctuaries. All such places possessed very special privileges and immunities, and Beverley and Durham, about which more is known and published, are but examples of the class in general. Beaulieu Abbey in Hampshire was a place of very frequent sanctuary resort, as were also St. Martin's Priory at Dover, and the Abbey at Westminster. The third of the great northern sanctuaries, Hexham, was another place of frequent resort. It was the great sanctuary for the English side of the border and had an interesting and romantic history. Originally, Hexham had been the Saxon foundation of Hagulstad and in the eighth and ninth centuries had possessed a church admired for its architectural beauty. But like many another noble building the church of

¹⁵ Case no. lxx., Sanctuarium Dunelmense, Surtees Society, pp. 30-31.

¹⁶ Ante, p. 21 note. The most popular of these chartered sanctuaries seem to have been the following, Beaulieu, Beverley, Durham, Dover (St. Martin's Priory), Hexham, St. Martin's le Grand (London), Norwich (St. Gregory's), and Westminster.

Hexham, then already known as a sanctuary place, was destroyed by the Danes in the year 875. For over two hundred years no attempt to rebuild it was made, but in the early part of the twelfth century a new edifice arose and, under the name of Hexham Priory became one of the great ecclesiastical centers of the north.

The canons of the Augustinian priory were privileged to offer protection to all fugitives, and Hexham became the great sanctuary resort of the border so that at the time of the dissolution of religious houses, the Archbishop of York, Edward Lee, pleaded hard with Cromwell to leave Hexham untouched on account of the loss and injury its doing away with would entail.¹⁷

The attack on the privileges and immunities of the chartered sanctuaries seems to have begun towards the close of the fourteenth century, in the reign of Richard the Second. The sanctuaries of Westminster and St. Martin's le Grand in London were especially objected to, but though the sanctuary protection they afforded was modified in 1377, yet it was decreed that the immunities of Holy Church should be respected. No guard was to be set by the lay power within the sanctuaries, nor were fugitives in their bounds to be under undue constraint. Nevertheless, those charged to guard against the escape of fugitives were to perform their duty well and securely, setting their watch outside of sanctuary bounds.¹⁸

One of the most notable cases in sanctuary annals was the attack made by Parliament on the privileges and immunities, in regard to the protection of criminals, claimed by the great abbey of Westminster.¹⁹ It arose in the year 1378 out

¹⁷ Sanctuarium Dunelmense et Beverlacense, Pref., p. xv., Mazzinghi. Sanctuaries, pp. 26, 27, 99.

¹⁸ Rotuli Parliamentorum, Record Comm., II., 369, III., 276.

¹⁹ Mazzinghi, Sanctuaries, p. 46, has dealt with this case at some length.

of complaints made by the prelates in the House of Lords as to the violation of the sanctuary at Westminster by armed men, who had slain two fugitives within church walls. The whole question of the protection afforded by the abbey charter was brought up. The clergy presented one petition pleading their side and the laymen replied to it with the following characteristic declaration as to the abuse of sanctuary at Westminster:

"May it please your Majesty, and his noble council, for charitys sake, to consider the great damage which many of your loyal subjects have received wrongfully by means of the franchise, which the Abbey of Westminster, under color of general privileges contained in certain charters from your noble progenitors, has from time to time usurped with respect to fugitives to Westminster, some of them debtors, some flying thither with their masters' property, and others in different ways relying on the said franchise, may it please you farther to cause a due interpretation to be obtained as to in what the said privileges consist before God and in reason, in order to resume all ambiguities, to the ease and quiet of your said Majesty's subjects, that no more mischiefs and inconveniences may henceforth arise from the said franchise, seeing that the said interpretation belongs of right to your Royal Majesty, and that the Holy Church should neither maintain nor give ground to suppose it supports what is false or sinful."20

The ball having thus been set rolling, other complaints poured in and the answer given by the king's council recognized that the right of sanctuary had been abused at Westminster in that fraudulent debtors and others had found

²⁰ Translated from Norman French, Mazzinghi, p. 43; see *Rot. Parl.*, III., 50-51.

shelter there and so victimized their creditors. An investigation was ordered to be made by masters in theology and doctors of both civil and canon law, as well as by the king's justices and other learned men, as to the privileges contained in the charters granted by previous kings to Westminster.

Charters from Edgar and from Edward the Confessor were produced and read, and, acting on the advice of the committee of investigation, the king, through his advisers, pronounced judgment, in the presence of the Abbot of Westminster who had been allowed to plead for his privileges and immunities. The king's award was in reality a compromise, for while "no one for the future should by virtue of any such general privileges or others contained in the same charters, have any immunity or franchise within the church, abbey or place of Westminster, in any case before mentioned (i. e., as to fraudulent debtors) or similar ones," yet it was expressly provided that sanctuary for felony should still exist, and in consideration of the great affection of the king for Westminster, and on account of his reverence for the noble body of Edward the Confessor, who had been canonized, and because other of his predecessors there reposed, "it is the will and intent of the King by the advice aforesaid, that those, who by fortune of sea or fire, robbers or other mischief without fraud or collusion shall have been so impoverished as to be unable to pay their debts and shall wish to enter the said sanctuary to avoid imprisonment of their bodies, may, and shall be in such a case suffered to, abide safely and freely in the said sanctuary, and there have personal immunity to the intent that they may in the meantime be sufficiently raised up to enable them to satisfy their creditors."21

This compromise did not give much satisfaction to the opponents of the chartered sanctuaries though, doubtless, it

²¹ Mazzinghi, Sanctuaries, pp. 48-50 being extracts from the Rotuli Parliamentorum quoted at length and translated.

lessened the abuse of sanctuary privilege at Westminster. Debtors of all sorts were still able, however, to find refuge there on the plea of misfortune and distress. That such sanctuary privileges as those possessed by Westminster were not to be tolerated elsewhere, is proved in a case in the year 1303-04 when complaint was made to Parliament that the abbots of Colchester and Abingdon usurped the same privilege of sanctuary as that in use at Westminster, affording protection "for all manner of men coming and flying within the precincts, for debt, detenue, trespass, and other personal actions, so far that they suffer no bailiff, coroner, or other minister of the king to perform their duties in execution of the law therein." As a result of this complaint the two abbots were ordered to appear and show warrant for claiming such privileges,²² but what the outcome was we do not know. In the year 1404, very serious complaints were preferred by the House of Commons against sanctuary afforded by the collegiate church of St. Martin's le Grand in London. Fraudulent persons, it was claimed, resorted thither in order to cheat employers and creditors; forgers and others received protection, and the place had become a nest of bandits beyond the reach of the law. For these reasons the Commons prayed redress, but for the time at least little redress was afforded, though other complaints of a like nature show the need for it.23

Besides the above there are many other flagrant cases of the abuse of the privileges of the chartered sanctuaries to be found in the Parliament records. Especially was this the case during the reigns of Henry VI. and Edward IV., when lawlessness and disorder seem to have been rampant in England, due no doubt to the constant wars of the Roses. On

²² Rot. Parl., III, 320, 17 Rich. II.

²⁸ Rot. Parl., vol. III, 503 b.

the other hand, the chartered sanctuaries often protected innocent persons from the vengeance of their enemies and the Abbey of Beaulieu is especially noted for the shelter it afforded to several adherents of the Lancastrian cause after the disastrous day of Barnet.²⁴ Westminster was also a favorite royal sanctuary, having been twice resorted to by the Queen of Edward IV., her son, Edward V., in fact, being born there in 1471.²⁵

At the time of the general regulation and limitation of sanctuary privileges in the reign of Henry VIII., the great chartered sanctuaries suffered the most. There was complaint made in 1534 to the Secretary Cromwell that the administration of royal justice was embarrassed, and the King's revenues consequently diminished, by the large numbers of liberties and sanctuaries in the northern counties. The writer referred to says: "There are two great sanctuaries in Yorksire beside the bishopric of Durham, where all murderers and felons resort, and have at least one hundred miles compass." In conclusion he advised that only Durham should be left as a sanctuary.26 So convinced was Cromwell himself of the need of reform that in 1536 he made a memorandum, "specially to speak of the utter destruction of sanctuaries," before the Parliament of that year.27 To destroy them utterly was not possible at the time, and even after the statutes of 1540 many of the collegiate churches, cathedrals, and hospitals, which had formerly enjoyed sanctuary privileges by charter, continued for almost a century to grant limited immunity by authority of the crown, though many others, as Beverley,

²⁴ Rot. Parl., III, 630; Mazzinghi, pp. 45, 51.

²⁵ Mazzinghi, Sanctuaries, p. 64.

²⁸ Calendar of Letters and Papers, Henry VIII., R. S., ed. Brewer, VII, no. 1669; Lapsley, County Palatine of Durham, p. 255.

²⁷ Calendar of Letters, etc., vol. X, no. 254.

Hexham, Beaulieu and so on, had gone out of existence.28

The words of an eminent English churchman of to-day, in speaking of the sanctuary afforded by Westminster, are applicable to the class of chartered sanctuaries in general: "The sanctuaries of mediaeval Christendom may have been necessary remedies for a barbarous state of society, but when the barbarism, of which they form a part, disappeared, they became almost unmixed evils; and the national school and the Westminster hospital which have succeeded to the site of the Westminster sanctuary, may not unfairly be regarded as humble indications of the dawn of better days."²⁹

²⁸ Ante, pp. 47, 48. Westminster seems to have continued to afford sanctuary, see Mazzinghi, Sanctuaries, p. 70.

²⁹ Stanley, Memorials of Westminster, p. 414.

CHAPTER IV

THE SANCTUARY-SEEKERS OF MEDIÆVAL ENGLAND

It is exceedingly interesting to note who those persons were who sought the protection of the great English sanctuaries. This we are enabled to do through the publication of certain of the sanctuary registers, such as those of Durham and Beverley, and through other sources of information which bear on the question of sanctuary in the Middle Ages.¹ These sources furnish first-hand information concerning the class of people who were sanctuary-seekers, the crimes they were guilty of, and their life within sanctuary walls.

The sanctuary register of the cathedral church at Durham is one of the most important sources of information as to the sanctuary-seekers of the fifteenth and early sixteenth centuries. Its records extend from June 18, 1464, to September 16, 1524, the sanctuary entries having been made in chronological order in the cathedral register, from which they have been gathered in one volume and published by the Surtees Society. During this half-century, two hundred and seventy-eight persons are recorded as having taken sanctuary at Durham, or an average of five or six a year. But as there are no entries for a considerable number of years, it is safe to assume, not that those years were blank, but that the entries were made elsewhere or not made at all. In all probability

¹ Sanctuarium Dunelmense et Beverlacense, Surtees Society, 1835, ed. James Raine contains two important registers, one for Durham the other for Beverley; Select Cases from Coroners' Rolls, Selden Society, ed. C. Gross, contains several interesting sanctuary cases. The chroniclers of the middle ages, published in the Rolls Series, also contain much valuable information.

there were many unrecorded cases of sanctuary-seeking for the number of entries in the register varies greatly from one to two in some years, up to eighteen and twenty in others. The largest number of entries for any one year is twenty-two.²

Many interesting and curious stories could be gleaned from these entries, but one or two instances must suffice here. Under the date July, 1497, a somewhat affecting entry occurs. A certain Christopher Brown appears at the church, seeking sanctuary, and makes confession before a notary and witnesses of having been the unwitting cause of the death of the three-year-old son of one Thomas Carter. Carter, it appears by this confession, was riding with his son before him on the saddle when Brown met and insulted him. In Carter's haste to alight and avenge the insult the little boy fell to the ground and was trampled to death by the hoofs of the restive horse. Brown recognizes himself as guilty of the child's death and prays for church privilege and immunity. Amongst the witnesses to the confession and registration the name of the master of the Abbey school at Durham is prominent.³

Almost without exception the entries in the register are in Latin, and in connection with a defaulting steward it is refreshing to find good downright English used; when on the twenty-ninth day of August, 1519, there came to the cathedral church a certain Robert Tenant who prayed immunity as follows:

"I aske gryth for Godsake and Saint Cuthberts, for savegard of my life and for savegard of my body from imprisonment concerning such danger as I am in enenst my lord of Northumberland for declaracion of accompts for which myn answer was to Master Palmys . . . and other more of my lord's servants that were sent to Ripon to examine me in the presence of Master Newman, president of the Chapter of

² Sanct. Dun. et. Bev., the year, 1505, is the year in question.

Sanct. Dunelm., etc., p. 2, no. iv.

Ripon, and that it would please my lord's good lordship to let me have as manie of such books of myn delivered to me as belonged to my charge, so that I might have them and make them up there, which I would do in as convenient haste as I could possible, and that done declare accompts within that said sanctuary, and if it were found I were in any manner of debt to my lord upon the determination of my accompt, I should either content the same, or els, if I would find no securitie, I would submit me to my lord, to which Mr. Survier demanded of me what time and space I desired to have for the perfecting of my books, and I answered that I could set no day, but as soon as I possible might, for the which cause I aske gryth for God Sake and St. Cuthberts, in the presence of Maister Cuthbert Conyers, Sir Thomas Dawson, and John Clerk and many others." 26th August, 1519, Per me, Rob. Tenant.4

In another case, occurring the same year, Thomas Ley, a chaplain, employed to collect the rents of his master, the Earl of Derby, tells how having gathered the sum of fifty-eight pounds he loses it on his way to his lord and fearing to be imprisoned flees to sanctuary. He confesses, however, that he has brought with him £13. 6s. 8d. belonging to the Earl. 5 Both this case and the former one are interesting as examples of one side of sanctuary privilege—that of protection afforded to unfortunates in distress through debt or inability to account for money belonging to their masters. In such cases the persons involved might not be dishonest, but only careless or negligent, and to throw them into a debtor's prison would have been an excessive and cruel punishment.

We find that in the case of some sanctuary-seekers the church authorities would issue a letter of testimonial and belief, if requested to do so. Such a letter was in the nature of a declaration, whereby the church authorities declared that

⁴ Sanct. Dunelm., etc., p. 86. Tenant appears to have first taken sanc tuary at Ripon, and then, later, fled to Beverley.

⁵ Sanct. Dunelm., etc., p. 84.

some particular man or men had taken sanctuary and confessed his or their crime. One example of such a letter is contained in the Durham register. It is in English and is addressed to all Christian people, being a declaration by John, prior of the Cathedral Church at Durham, that one Robert Atkinson has taken sanctuary confessing the murder of William Skoloke of Crosby, for which three other members of the Atkinson family have been arrested and "in dorance holdyn and for felony greatly troublytt." Wherefore the prior puts forth this declaration "for somuch as it is meritory and medeful to testify to the truth in avoydyng of all such inconvences as may fall her uppon;" and he sends out a copy of the immunity and "grith" as it was taken and registered.6

In some cases as many as three, four, or five sanctuary-seekers would arrive in a group, fellow-comrades in crime or evildoing. In one or two instances only do we find the same individual or individuals taking sanctuary a second time, but cases of men taking sanctuary for crimes committed long before are not at all infrequent. In one case sanctuary is sought by a murderer twenty-six years after the deed had been done, while in another instance twelve years had elapsed, and in yet a third two murderers who had escaped arrest for eight or nine years are at last forced to seek sanctuary, in 1486, with their goods and chattels, in order to escape punishment and forfeiture. A somewhat curious case is furnished by a man who takes sanctuary for the alleged theft of an ox, seventeen years previously. He denies the imputation but deems it wisest to seek protection in the church.

Out of the two hundred and forty-three crimes and misdemeanours recorded in the Durham register, one hundred

⁶ Sanct. Dunelm., etc., no. xlviii, p. 21.

⁷ Sanct. Dunelm., etc., nos. cxiii, clvii, pp. 46, 61. See for several additional cases of lapses of time Réville, Revue Historique, Sept., '92, pp. 24-25.

and ninety-five, or considerably more than three-quarters, are cases of murder or homicide. Of the less serious causes for taking refuge there are sixteen cases of debt, nine of cattlestealing, seven of theft; four each of horse-stealing, housebreaking, and escaping from prison, and one each of rape, petty larceny, thief-harboring, and failing to prosecute.8 The occupation or rank of the fugitive is only given in the Durham register in the case of forty-five of the petitioners, but the instrument of violence is given in two hundred instances. Every variety of weapon of the day, almost, is mentioned, from a crab-tree staff to a wood axe, and anyone interested in mediaeval weapons of offense would do well to consult the Durham sanctuary register. The favorite weapons seem to have been daggers and swords, of all and every kind; then clubs, staves, lances, bills, and axes. Men were slain any way in the heat of a quarrel, but a stab from a sword or dagger, or a knock on the head with a club, a bill, or an axe, occur most frequently.9

The sanctuary register which belonged to the Church of St. John of Beverley, supplements to a certain extent that of Durham. The period covered by the entries is, roughly, from 1478 to 1539, though as in the case of Durham there are no entries for many of the years between these dates. Nevertheless, close on five hundred persons are recorded as having taken sanctuary there during these sixty years. As regards the nature of the entries, they are much longer than those in the Durham register and in over three fourths of the cases the trade or occupation of the fugitive is stated and in nine

⁸ Sanct. Dunelm., etc., Pref., p. xxv. The entries are there summar ized, but not altogether accurately.

⁹ Sanct. Dunelm., etc., Pref., p. xxv, where a list of the various weapons is given.

¹⁰ The two are published together, see Sanctuarium Dunelmense et Beverlacense, Surtees Society, 1835.

tenths the nature of the crime is given.¹¹ In these respects, therefore, the register is especially valuable. Crimes of violence recorded in the Beverlev register aggregate only two hundred, while there are two hundred and eight cases of debt and fifty or sixty of minor crimes. Of the doers of violence, the tailors appear most numerous as a class. Either the tailors of this time were bold and violent men or they were particularly liable to provocation or assault, for in only one of these ways can we account for the frequent recurrence of members of that trade in the sanctuary register. Certainly in proportion to their number in the community they seem to have supplied more sanctuary-seekers, to Beverley at least, than any other class, and we find many examples of their bloodthirsty deeds. In general, however, the sanctuary-seeker was a yeoman, a husbandman, or a farmer. As the laboring and agricultural classes formed the greater part of the population of England at this time, it is only natural that they should supply the largest number of sanctuary-seekers. Of the debtors who took sanctuary at Beverley, the butchers are most numerous, and their lead in this respect gives them the first place, also, as a class, amongst the offenders in general. All trades and occupations, however, supplied their quota of criminals, and it is somewhat difficult in general to place one class before another in point of criminality, though the tailors and the butchers seem to deserve the first place in regard to deeds of violence and cases of debt, respectively. The great mass of sanctuary-seekers belonged

11 The following is a typical Beverley entry:

John King, carpenter.

"Johannes Kyng, nuper de Stanfeld in Comitatu Lincoln, carpenter, viij die Aprilis, anno xix Edwardi iiij, venit hic et petit libertatem homicidis concessam, pro eo quod idem Johannes, apud Stanfeld predictam, die Dominica in media quadrigesima interfecit Rogerum Yerburghe de eadem, laborer; et accepto ab ipso sacramento, secundum consuetudinem, admittus est ad libertatem predictam." Sanctuarium Dun. et Beverlacense, p. 161.

to the middle and lower classes of society, and it is only occasionally that a gentleman or nobleman is found resorting to sanctuary for any offense save one of a political nature. Ecclesiastics are several times met with as taking sanctuary, and women occasionally.

There are several very interesting cases amongst the Beverley entries, though the exceedingly meager details balk the curiosity of the student. In one instance a certain Robert Beawmont, a learned man (litteratus), and Elizabeth Beawmont, gentlewoman, the former of Almabury in Yorkshire and the latter from Heton in the same county, seek sanctuary at Beverley on September 25, 1479, for the death of Thomas Aldirlay, of Almabury aforesaid, some months previously. How they slew him, whether by poison or violence, we do not know. They take the sanctuary oath according to custom and are admitted.12 We cannot but wonder what were the particulars of the crime which brought this scholar with his kinswoman, both doubtless belonging to the noble northern family of Beaumont, into the sanctuary of St. John at Beverley-but history is silent. In any case, however, this is an important entry as it is the first instance we have of a woman being admitted to the sanctuary of Beverley and is in fact the only case of the sort in the register.

Another interesting Beverley entry is that which occurs under date of July 19, 1529, when Richard Dawson of Ponte-fract, minstrel, from the County of York, seeks the liberty and protection of St. John of Beverley for the murder and death of Brian Routch, lately of Skipton, a minstrel also.¹³ The border minstrels were, no doubt, often a quarrelsome lot, and this is by no means the only example history affords of one bard slaying another.

¹² Sanct. Dun. et Bev., p. 162, no. ccxxxi.

¹⁸ Sanct. Dun. et. Bev., p. 183, 19 Henry VIII.

It is worth while observing that at Beverley, and at Durham also to a less degree, the sanctuary-seekers came from all parts of England. This is easily understood when we realize that at that time the law was not all-reaching or all-pervading in England, and that the farther a man could remove himself from the scene of his crime the safer he would feel from its consequences. Thus it is that Londoners and men from the Midland districts are frequently found entered in the Beverley and Durham sanctuary registers and that Yorkshiremen are found fleeing to Durham in some cases, and inhabitants of the Palatinate seeking shelter at Beverley in others.

The Coroners' Rolls afford a number of typical cases of sanctuary-seeking, some of which have already been noticed.14 The persons referred to in such official records are those dealt within a judicial manner by the legal machinery of the day. The ones who sought refuge in the chartered sanctuaries came under special rules and immunities. In the year 1332 we hear of two promising recruits for the king's army setting upon and mortally wounding the constable, John of Cold Ashby, as the result of a quarrel, and then the two culprits take refuge in the church at Ashby, but "forthwith the recruits of Northampton who were on their way to the king came and took them vi et armis-by force of arms-from the church, to make them serve the king. The said John, son of Simon Robert, lived during the two following days and then died of his wounds."15 The king was not going to lose two soldiers just because they had happened to slay a constable in a quarrel. That the practice of using sanctuary men for

¹⁴ Ante, pp. 40-41.

¹⁶ Select Cases from Coroners' Rolls, Selden Society, pp. 74-75, County of Northampton.

soldiers was not unknown and was sanctioned by the law is easily proved. 16

We have already had one or two examples of women sanctuary-seekers, but such cases are somewhat exceptional. Women were more frequently the victims than the perpetrators of crime, and nearly all persons who sought sanctuary were men. On this account the cases in which women appear as sanctuary-seekers are especially interesting. For example, in the year 1225, we have the following singular case: A woman who wished to be separated from her husband, probably for good reasons of her own, accused herself of an imaginary felony, took sanctuary and then abjured the realm.¹⁷ It was a mediaeval method of divorce. Other instances of women taking sanctuary, and sometimes abjuring as well, can be found here and there in the records, but in proportion to the number of male sanctuary-seekers they are few and far between.¹⁸

The total number of sanctuary-seekers in England must have been very large if we are to judge from the number found resorting to sanctuaries like Beverly and Durham, typical of one class, and the number found in the Coroners' Rolls and assize rolls of counties. For a single county, that of Stafford, the number of persons resorting to ordinary churches for sanctuary in the year 1272-73 was twenty.¹⁹

When we multiply this by the number of counties in England and add to the result the number of those who fled each year to the thirty odd chartered sanctuaries, or took refuge in

¹⁶Act of 22 Henry VIII., cap. xiv, Statutes, III, 332; Lapsley, County Palatine of Durham, p. 255, note 1; Mazzinghi, Sanctuaries, p. 104.

¹⁷ Cited by Réville, Revue Historique (Sept., 1892), p. 26.

¹⁸ Select Cases from Coroners' Rolls, I, 38, under date 1279, has the case of a woman who killed her husband, then took sanctuary and abjured. Mazzinghi, pp. 38, 39-40, gives several instances of women taking sanctuary in the year 1272-73 in various churches in Stafford.

¹⁹ Mazzinghi, cap. iv, pp. 35-42, has a record of these cases in Stafford.

other privileged places, the total number of sanctuary-seekers must be considered large. At the lowest computation we cannot place the number each year much below a thousand persons. This is not an exaggerated computation by any means, and it serves to show the prevalence of sanctuary-seeking. Everywhere throughout the realm were little groups of criminals gathered together, but especially were they to be found with the walls of the chartered sanctuaries.

Not a great deal is known as to life within sanctuary limits, but what little we do know leads us to conceive no pleasant picture of what such life must have been. An Elizabethan poet, Michael Drayton, in his Wars of the Barons, has given us a stanza which probably does not fall short of the truth. He writes:

"Some few themselves in sanctuaries hide
In mercy of that privileged place,
Yet are their bodies so unsanctifide,
As scarce their souls can ever hope for grace,
Whereas they still in want and fear abide,
A poore dead life this draweth out a space,
Hate stands without and horror sits within,
Prolonging shame but pardoning not their sinne."

This, however, presents the darkest side of sanctuary, for, as we have seen, fugitives were excellently received and treated at some places, such as Durham, Beverly, and other great sanctuary centers in England.

In general, after the various formalities as to entrance had been gone through with, the fugitive became one of a little group of men, with sometimes a few women amongst them, gathered together for protection within sanctuary limits. They formed a community absolutely apart from the rest of the world, living a life of their own. The number of inmates at any given sanctuary might vary from time to time. It depended on the accommodation afforded by the place,

and then again some sanctuaries were more popular than others and attracted more fugitives by reason of the advantages they offered in the way of treatment and the greater security they afforded from the law or from outside vengeance. In most cases the number of inmates rarely exceeded twenty, and, in fact, that would be a large number. However favorable the treatment accorded to fugitives, the life of those within sanctuary limits must have been undesirable. It was frequently made more so by the evil and wicked conduct of some of the fugitives. We hear of sanctuary men banding themselves together and sallying out into town and country plundering and terrifying the inhabitants. Then when the hue and cry was raised they would go back to their refuge. Such proceedings were contrary to the sanctuary rules and regulations, but such infraction does not seem to have cost the offenders their sanctuary protection. In London, in the fourteenth and fifteenth centuries, loud complaints were made concerning the conduct of the sanctuary men at Westminster and at St. Martin's le Grand, who would issue forth to commit depredations and do other mischiefs.20

Fortunately for the general peace, residence in sanctuary, throughout the greater part of our period, was, in most cases, strictly limited both by the law of the land and by the rules and regulations of the great sanctuaries. So by abjuration or by flight, sometimes merely from one sanctuary to another, England was each year rid of many sanctuary-seekers, and a settled nest of criminals was rendered impossible, until Henry VIII., in 1540, set aside his seven sanctuary towns and segregated rogues and rascals in them. The discontent aroused by this act, however, will be dealt with later; so in the next chapter we shall pass on to the important topic of violation of sanctuary.

²⁰ Rotuli Parliamentorum, vol. II, 369; III, 276, 320; IV, 503 b; V, 247. Mazzinghi, chap. iv, pp. 35-55, has many interesting cases of sanctuary-seeking and sanctuary-abuse.

CHAPTER V

VIOLATION OF SANCTUARY PROTECTION

The fugitives who fled to sanctuaries for protection were not always sure of absolute safety within sacred precincts. Numerous cases of violation of sanctuary attest this, especially in connection with important offenders. Even in regard to less important sanctuary-seekers, violation of sanctuary took place now and again, though on the whole the general right of criminals to the protection of the Church was recognized and respected by the law and by the people at large. But in regard to high and petit treason, or great political offenders, those guilty could not expect to escape punishment by a resort to sanctuary. The Church, indeed, always regarded violation of sanctuary as a heinous crime provoking divine vengeance on the perpetrators. In default of this vengeance they would call on the secular arm to punish the guilty and to see that the privileges and immunities of the Church were respected. In addition, excommunication was to be pronounced against all violators of sanctuary, and the scathing denunciations against such by the Council of Lambeth, in 1261, is but one of many like decrees in English ecclesiastical records and Legatine constitutions.

We have already seen how in Anglo-Saxon times the breaking of church frith entailed a heavy fine, or even worse punishment, on the offender, and that, therefore, violations of sanctuary were exceedingly uncommon. In the more turbulent times succeeding the Norman conquest, however, several interesting cases of sanctuary-violation are met with. One of the very earliest of such instances is to be found in the

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pages of the chroniclers of the time and relates to a quarrel or feud amongst the advisers and officers of Bishop Walcher of Durham in the year 1080. We hear first of rivalry and illfeeling between Liulf, one of the Bishop's chief advisers, and Leobwine, one of the episcopal officers. The Bishop's nephew Gilbert, is also mixed up in the quarrel on the side of Leobwine. A taunt, directed at Liulf at a council meeting, accentuates the quarrel and soon afterwards Liulf is slain by his enemies. As the Bishop is suspected by many, and perhaps not unjustly, of being concerned in the matter, he undertakes to clear himself by oath of all complicity in the matter, and a gemot, or assembly, is called at Gateshead. But the attitude of those who supported Liulf appears so threatening that Bishop Walcher is forced for his own safety to take refuge, with a few of his followers and chief councillors, in a near-by church. This but postpones their fate, however, for in a later tumult the bishop and his supporters are attacked, and the prelate with his nephew, Gilbert, fall victims to the vengeance of the friends of Liulf. Leobwine, the chief object of animosity, makes good his escape and takes sanctuary in the church of Durham. But sacred protection does not avail him; fire is employed to drive him from his last refuge, and the unhappy man rushes forth to perish on the spears of his adversaries. The murder of Liulf is thus triply avenged.1

In such a state of society as this it is not remarkable that sanctuary protection, which was needed, was not always respected. From contemporary accounts we must adjudge the capital of the palatinate of the north, Durham, to have been one of the most lawless places in all England. About twenty years after the murder of Bishop Walcher, we learn

¹ For an account of this case see William of Malmesbury, De Gestis Pontificum, R. S., p. 271; Florence of Worcester, I, 14-15; Simeon of Durham, I, 116-117; II, 208-210; Anglo-Saxon Chronicle, I, 351; and Lapsley, County Palatine of Durham, pp. 107, 109.

that his successor, Bishop Turgot, did not hesitate to drag fugitives from their refuge in the church and wreak his vengeance on them, although, it is said, such a proceeding was previously unheard of in Durham.²

But the respect for sanctuaries doubtless increased with the growing power of the church in England. Even in Durham, in the first half of the twelfth century, we find a notorious case of sanctuary-violation arousing great indignation and outery amongst the populace. The pious chronicler, Reginald, relates the story of how a certain youth, in the service of Bishop Geoffrey, was slain in a quarrel and the murderer at once took sanctuary in Durham minster. The friends of the murdered youth surrounded the church to prevent the escape of their prey within, and when every other means had failed, six of them entered the sanctuary, while the monks were at supper, and while four stood on guard the other two proceeded to the shrine. There they found their victim on his knees before the altar and mercilessly attacked him, inflicted eleven ghastly wounds, and left him for dead. The news of this sacrilege raised a tumult in the town and a great multitude assembled, indignant that such an outrage should have been perpetrated in their midst. The bishop had to reconsecrate the church the day following and to pardon the victim, who survived his wounds and recovered. The hue and cry was raised after the murderers and sometime later one of them was captured in a village a few miles from Durham. He was immediately loaded with chains and thrown into prison to await torture and "a horrible kind of death."3

²Wm. of Malmesbury, *De Gestis Pontificum*, p. 273: "Si quando ad ecclesiam Sancti confugerit, abstrahere non dubitant ausus scelus omnibus retro annis inauditum."

³Reginaldi Monachi Dunelm., *Libellus*, Surtees Society, 1835, caps. lx. and lxi, pp. 119-122.

Sometimes, to the pious chronicler, the hand of God was clearly apparent in the punishment inflicted on violaters of churches. Thus Reginald of Durham tells us of the punishment which followed on the violation of a church and churchyard at Arden forest, on the border of Nottinghamshire. The exact date of the occurrence is uncertain, but falls within the reign of Stephen, probably during the early part of that king's rule. The church at Arden forest was dedicated to Saint Cuthbert, and during the eight days' celebration of the feast of that saint, in March, the countryside is ravaged and devastated by a band of lawless and violent men who slay and rob all whom they meet. The village surrounding the church being finally attacked, the terrified villagers seek sanctuary with their property in the church or churchyard, or fly to the woods and caves. But in spite of the vigorous remonstrances of the priest, the robbers boldly break open the doors of the church and violate the sanctuary. people are plundered and maltreated, and, laden with spoil, the robbers retreat to a marshy island in the neighboring fen. There they have a royal feast, but being alarmed after their revels by the approach of the courageous parish priest, with his servants and some of the villagers, they attack each other in drunken frenzy. Finally, overcome by fear and terror, they attempt to escape from the island. A few swim to land, others are drowned or are slain, while some are captured by the villagers. The plunder is all recovered and much property restored to the original owners, while the rest is gathered into the churchyard by the priest. The chronicler, like a true mediaevalist, ascribes the discomfiture of the robbers to God and St. Cuthbert.4

The records of the Plantagenet period supply many notable cases of violation of sanctuary and the history of a few

⁴Reginald. Mon. Dun., cap. lxv, pp. 130-34; Mazzinghi, pp. 73-74.

of these will serve to illustrate how the privilege of sanctuary was regarded by the State. It is not necessary to dwell on one of the earliest of such cases, that of the death of Thomas A'Becket, Archbishop of Canterbury. After seeking in vain to carry the stubborn prelate from the precincts of his cathedral, the four knights slew him by his own altar screen and thereby violated the sacred precincts of the sanctuary. Extreme advocates of the sanctuary privileges of the church have put forward, at one time or another, the claim that it was partly in defense and vindication of this right of protection that Becket became a martyr. This contention is hardly justified by the facts of the case, as all must admit.

In the year 1191 a more typical case of sanctuary-seeking is found. Geoffrey, Archbishop of York, had quarreled with his half-brother, the king, and with Richard's representative and chancellor, William Longchamp, Bishop of Ely.⁵ In fear of his life and person, Geoffrey took refuge in St. Martin's Priory at Dover, one of the great English sanctuaries. He arrayed himself in his full archiepiscopal robes, but by order of Longchamp was forcibly removed five days later and imprisoned at Dover. In excuse for the extreme measures taken by the Bishop of Ely it was said that St. Martin's Priory was under control of the bishop, who in addition was papal legate and so possessed of power sufficient to warrant such violation of privilege.

Another startling instance which showed to what extremes the state would go when the capture of an important

⁵The trouble arose through Geoffrey's returning to England to claim the Archbishopric of York after being consecrated, in virtue of a papal mandate, by the Archbishop of Tours. On arriving in England he was required to take the oath of allegiance to Richard or depart from the kingdom, but eluding the officers set to watch him he took sanctuary; fearing no doubt that violence might be intended to him by his enemy, Longchamp the regent. See Roger de Hoveden, R. S., II, 138, 140, 144. Mazzinghi, Sanctuaries, p. 75.

criminal was necessary, is furnished in the case of William Fitzosbert, or Longbeard, as he was called, in the year 1196. This man was a popular demagogue of the day, the leader of the democratic party in London. He belonged to a wellknown civic family, had been a Crusader, but having become penniless was thrown on his own resources. After heading a dangerous revolt in the city he was convicted and condemned to death, but after slaving one of his guards he managed to escape to the church of St. Mary-le-Bow. This church belonged to the Archbishop of Canterbury, Hubert Walter, who was then the chief justiciar, and orders were given by him to drag Longbeard out by force. The fugitive had, however, taken refuge in the lofty tower of the church but the resolute archbishop commanded to set fire to the tower. This was done and the smoke and flames forced Longbeard to descend and surrender.6 At the hands of the law he suffered a traitor's doom, being dragged naked through the streets of the city, tied to a horse's tail, over rough and flinty roads to Tyburn. There he suffered a living death, by being cut open and disemboweled, before he was finally hanged "on the fatal elm."

The violation of the church of St. Mary-le-Bow in such an audacious manner greatly angered the Canterbury clergy, and a little later when Hubert Walter was forced to resign the justiciarship, in 1198, one of the chief articles of complaint to the Pope, alleged against Hubert by the canons, was this very case of sanctuary violation.⁷ The Pope does not seem to have censured Archbishop Walter in the matter,

⁶Roger de Hoveden, *Chronica*, R. S., vol. IV, 6, 48: "Qui cum inde exire nollent, factus est insultus in eos: et cum nec sic reddere se vellent, ex praecepto archiepiscopi Cantuariensis, regis justitiarii, appositus est ignis, ut per fumum et vaporem ignis exirent."

⁷Roger de Hoveden, IV, 48: "Quod ex precepto illius violata fuit pax ecclesiae Sanctae Mariae" etc.

however, and in palliation of his offense was the fact that the church of St. Mary-le-Bow was the archbishop's own peculiar, and that Longbeard was probably regarded as a heretic. It was rather the fact that Hubert Walter had led an army against the Welsh that caused the pontiff to judge the secular office of justiciar to be incompatible with the ecclesiastical dignity and functions of the archbishop. In any case Hubert was forced to resign the justiciarship.

Early in the reign of Henry III. a very flagrant case of sanctuary violation took place. The king's chief councillor and adviser, Hubert de Burgh, having fallen under the royal displeasure, in 1232, was in danger of imprisonment, or worse, and fled for refuge to Merton Priory, in Surrey. The king commanded the Mayor of London to seize him there, but on Hubert taking refuge at the high altar, the sanctuary was respected. Having ventured from the shelter of Merton, the unfortunate adviser was again in danger and again took sanctuary, this time in a small chapel at Brentwood in Essex. From thence, however, he was ruthlessly torn by order of the king, although at the time he had taken refuge at the altar and was grasping the cross in one hand and the host in the other. His feet were tied beneath his horse's belly and he was brought back to London in ignominious captivity and thrown into the Tower. Such an open violation of the church's liberties and privileges alarmed the English clergy greatly, and the Bishop of London threatened to excommunicate the guilty persons. Under these circumstances the king ordered de Burgh to be restored to the chapel. But this was a mere concession to religious sentiment, for the sheriffs of Herts and Essex so straitly guarded the fugitive that he was finally forced to surrender through starvation and the hopelessness of escaping. Again he was carried to London and thrown into the Tower, and later, having escaped a capital sentence, was sent to the castle of Devizes as a prisoner of state. After arriving there he man-

aged to escape from his gaolers and took refuge in a church in the diocese of Sarum. Once again he was dragged from the altar, grasping the cross, and taken back to the castle. Once again the ire of the Church was aroused, and the Bishop of Sarum proceeded to the castle and demanded the restoration of the sanctuary-seeker to the Church, and protested against the violation in strong terms. His demands were refused, his protestations were unheeded, and he forthwith excommunicated all within the castle who had been concerned in the matter. In addition a complaint was preferred to the king and, backed by the Bishop of London and other prelates of the day, it was sufficient to cause orders to be given to restore the person of Hubert de Burgh to sanctuary. Again, therefore, had the Church vindicated its privilege of sanctuary, but as in the former case, the victory was a hollow one, for the sheriff of Wilts was ordered to see to it that the fugitive did not escape or receive food or nourishment. Had it not been for the opportune arrival on the morrow of a band of armed friends of de Burgh, whose mission it was to free him, there is little doubt that he would have had to surrender once again. As it was he escaped into Wales and was safe, being later reconciled to the king.8 Under a king less open to ecclesiastical influence than Henry III, it is doubtful if these two successive restorations to sanctuary would have taken place. As it is they prove how powerful the Church was in the thirteenth century and how strongly the clergy were inclined to uphold the right of sanctuary.

In 1239 a notable instance of the power of the Church to protect inmates of sacred edifices occurred in connection with the abbey of Waverley, in Surrey. A shoemaker, who was employed in the abbey, was seized and arrested as a

⁸ Matthew Paris, *Chronica Majora*, R. S., vol. III, pp. 222-227, 230-32, ²52-53.

homicide, within abbey limits, by the officers of the law. This the abbot and convent decided was a violation of sanctuary privileges and they appealed to the papal legate, Otho, for ecclesiastical intervention. This appeal not producing any result the abbot then called on the king and council to redress the grievance complained of. Although the council was at first opposed to the suit of the abbot, yet after considerable litigation and trouble they were persuaded to adjudge the matter in favor of the right of sanctuary possessed by the abbey of Waverley. The whole of the conventual buildings and enclosures were declared safe from violent entry or seizure of those dwelling there. The shoemaker was brought back, and those who had committed the violation were first excommunicated, then scourged, and then absolved and pardoned, after they had made satisfaction to the abbey for damages sustained through their act.9 This was certainly an important assertion of the Church's right of protection, and the full and free recognition by the king's council of the privileges possessed by the abbey must have placed the privilege of sanctuary on a firmer basis.

On account of the numerous cases of violation of sanctuary and of interference with the privileges of the Church in regard to the protection of criminals, there are several cases of complaint by the prelates to King Henry III. The clergy were active and energetic in defense of sanctuary privilege and bitterly resented any violation of it. In the year 1300 the Dean and Chapter of the church of St. Mary at Stafford sent in a petition to the king against persons who had forcibly seized and removed sanctuary-seekers from their church. The result of the petition or details of the alleged violation are not given, 10 but we may suppose that all pos-

⁹ Annales Monastici (Waverley), R. S., vol. II, p. 327.

¹⁰ Mazzinghi, Sanctuaries, p. 79; Reports of Deputy Keeper of Records, no. VI, ii, App. p. 97.

sible redress was granted by the king. The first two Edwards both made regulations concerning sanctuary privilege, as we have seen, and the institution became more firmly established than ever.¹¹

During the troubles which marked the opening years of Edward III.'s reign, there were many cases of sanctuary violation of a general nature, especially in connection with the risings in the monastic towns. At Abingdon, in particular, the insurgent townsmen invaded the precincts of the abbey church, wounded one of the monks, and dragged the others away to be thrown into prison.¹² With the restoration of peace and order in England such lawlessness and violence almost disappeared, and few cases of sanctuary violence are to be found during the remainder of the third Edward's reign.

In 1378, however, soon after Richard II. had come to the throne, a very important case of sanctuary violation occupied the attention of Parliament. Simon Sudbury, the Archbishop of Canterbury, with other prelates, complained in a petition to the king and Parliament "that a certain Robert Haulay, Esq., and another person, servant of the church, had been set upon and killed in the church itself (the abbey church at Westminster), by a great number of armed men, at the very hour when High Mass was being celebrated at the High Altar." 18 Such a sacrilege as this it was claimed concerned not only the privileges of the Abbot of Westminster, the Archbishop, the metropolitan, and the Bishop of London in whose diocese the abbey lay, but the English Church, the Pope, as head of monastic houses, and the church and clergy at large, wherefore they prayed for relief and redress. We have already seen that

¹¹ Ante, p. 26.

¹² Brit. Mus. Ms., 28666, f. 156; Cal. Pat. Rolls, 1327-30, p. 288.

¹³ Rot. Parl., vol. III, p. 37; Mazzinghi, Sanctuaries, pp. 46-47; Walsingham, Historia Anglicana, R. S., I, 376-78, gives an account of this occurrence.

this expostulation resulted in a counter attack from the temporal lords and that the privileges of Westminster were abridged in consequence, though not very greatly.¹⁴ The murderers of Haulay, however, received a well-merited punishment. They were excommunicated and had to pay a large fine to the abbey authorities. The church itself was closed for several months, on account of the sacrilege, and had to be reconsecrated.¹⁵

During the fifteenth century cases of sanctuary violation are very frequently to be met with. Many of the unfortunate followers of Wycliffe, belonging to the sect of Lollards, were torn from sanctuaries, as being heretics, and condemned to be burnt. In 1427 we hear of the Abbott of Beaulieu being called on to produce proof of his liberties and franchises, if he had any, whereby he was entitled to protect one William Wawe, "a heretic, traitor, common highwayman, and public robber." Wawe was arrested, and we learn his fate from Stowe who writes briefly in his Annals, "Willie Wawe was hanged." 16

The kings of that period had little or no respect for sanctuaries when these sheltered political enemies. In 1454 the Duke of Exeter, who had been associated with some troubles in the north, was removed by force from the abbey of Westminster in spite of the protestations and opposition of the abbot and convent. Edward the Fourth seems to have had even less respect for sanctuary privilege in the case of political offenders. After the battle of Tewkesbury, in 1471, he caused the Duke of Somerset and twenty other Lancastrian leaders and nobles to be dragged from sanctuary

¹⁴ See, Ante, pp. 55-58, for a discussion of this case of a great chartered sanctuary's privileges.

¹⁵ Walsingham, Historia Anglicana, pp. 376-78.

¹⁶ Proceedings and Ordinances of the Privy Council, ed. H. Nicolas, Record Comm., vol. III, p. 14; Mazzinghi, Sanctuaries, p. 50, quotes Stowe.

¹⁷ Proceedings Privy Council, vol. IV., p. 56.

in a nearby church and beheaded.¹⁸ This was but one of his many acts of sacrilege. Even his successor, Richard III., did not venture to invade sacred precincts so boldly, though he is said to have set guards around Westminster and along the banks of the Thames to prevent his political enemies taking sanctuary in the abbey.¹⁹

Richard's successor, Henry VII., though often provoked to do so by various pretenders and rebels taking sanctuary, seldom ventured to commit open violation or sacrilege.²⁰ But, as we have seen, by procuring a papal bull, whereby sanctuary was limited and important culprits could be "looked to" by keepers appointed by the king, he was able to get his victims out of sanctuary and into his hands. Nevertheless, Perkin Warbeck twice escaped death by means of sanctuary, and fugitives could still rely on the Church being on their side.²¹ In fact it can be said, in general, that although there are a number of important cases of sanctuary violation to be met with in the annals of English history, yet the rights of the church in regard to the protection of those seeking a refuge from their foes, or from the law, were usually re-

¹⁸ Mazzinghi, Sanctuaries, pp. 82-83.

¹⁹ Mazzinghi, Sanctuaries, pp. 57-58, 83, on the authority of Sir Thomas More's Life and Reign of Edward V., which he quotes.

²⁰ Sir Humphrey Stafford was, however, in the early years of Henry VII.'s reign, taken from a church at Colnham, near Abingdon, and executed at Tyburn by order of the king. For this act, amongst other things, Henry was denounced by Perkin Warbeck in the famous proclamation of 1495. Mazzinghi, Sanctuaries, pp. 66, 67.

²¹ Perkin Warbeck was twice protected by the church. In 1497, on the approach of the royal forces, "this impostor took refuge in Bewley (Beaulieu), in the New Forest where he and divers companions registered themselves as sanctuary men." Bacon, History of Henry VII. Later, escaping from imprisonment, he took refuge in the Priory of Shene and owed his life to the intervention of the prior. Mazzinghi, Sanctuaries, 67-68.

spected. Further, also, it can be said, that all violations of sanctuary were protested against by the clergy, even down to Reformation times, and very frequently the perpetrators were severely punished by fine and excommunication. It was only by strenuously upholding its privileges that the Church could hope to retain them, and though it was a vain fight which they waged in behalf of the right of sanctuary, yet it was a long and a valiant one.

CHAPTER VI

SPECIAL AND PECULIAR FORMS OF SANCTUARY

The rules governing sanctuary and abjuration were, as we have seen, by no means uniform throughout England. But besides the class of general sanctuaries, consisting of all churches and sacred edifices, and the chartered sanctuaries, which while coming under the first head possessed special privileges and immunities in addition, there were a number of other places in which peculiar forms of sanctuary privilege obtained. In connection with some of the great English immunities and liberties, in particular, do we find extraordinary examples of sanctuary and asylum. The two great palatine earldoms, Durham and Chester, were noted places of resort for those criminals who were under the ban of English law. In Durham, as we have seen, the shrine of St. Cuthbert formed a safe refuge, but in Chester the protection extended was secular rather than religious. The right of affording sanctuary within the earldom was claimed and exercised by the Earls of Chester from an early period and it proved a valuable source of revenue as fines were exacted from all sanctuaryseekers in the county; if they should die a heriot had to be rendered; and should there be no heirs of his body, the sanctuary man's goods and chattels were forfeited. Certain places in the county, such as Hoole Heath, Overmarsh, and Rudhealth, became noted centers for fugitives seeking protection, though the privilege was not confined to such wastes but extended throughout the county. In one instance at least, the Earl of Chester farmed out the profits from sanctuary, but ordinarily, while he allowed fugitives and strangers to

settle as retainers on the lands of his barons, he reserved to himself all fines payable by criminals who resorted thither for protection. Another peculiarity, and one which must have attracted criminals, was that there was no limitation as to the time of protection, no forty days of grace and then abjuration. As long as the fugitive behaved himself and lived peaceably he could live where he wished in the county of Chester nor need fear any molestation, but might end his days there. And this protection extended to the worst of criminals equally with the least, to felons, Jews, traitors, and others, as well as to debtors and thieves. The natural consequence of such unlimited protection was that the Palatinate of Chester became the most notorious nest of criminals in England. There could be found the offscourings of the realm, men whom no other sanctuary would receive. Such a state of things told severely on the morals and conduct of the inhabitants of the district and caused great complaint and demanded speedy reform. Accordingly, an act was passed by Henry IV., by which most of the criminals resident in the earldom of Chester were deprived of this immunity and made liable to abjuration or outlawry and forfeiture of their goods. This lessened the evil greatly, though on account of extensive immunities still allowed to debtors, the county continued to be a favorite place of criminal resort.1

Some writers on the history of continental institutions and origins have put forward the hypothesis that the right of asylum and protection was connected with the idea of municipal freedom, more or less closely.² The only examples of any such connection in English municipal history are perhaps to be found in the cases of fugitive villains received

¹Lysons (Daniel and Samuel), Magna Brittania, vol. III, County Palatine of Chester, p. 299; Mazzinghi, Sanctuaries, pp. 16-18.

² Flach, Origines de l'ancienne France, ch. ix.

and protected in the English boroughs.³ There is, however, a case somewhat analogous, bearing on sanctuary protection, in connection with the rising of the townsmen of Bury St. Edmunds against the abbot and convent who controlled the borough. This rising took place in 1327 and was one of the most serious of the municipal revolts, a number of which took place in the same year. The townsmen of Bury, after many threats and some violence, managed, finally, to extort the abbot's assent to a charter of liberties which they had drawn up. In the main this charter sets forth the usual municipal privileges of the day, but the twenty-eighth clause reads as follows:

"At the same time we will and grant that if any man in the town commit a felony and can not get to the entrance into the monastery he may go to the standard, which is appointed for the purpose, and can clasp the said standard, that then he be so completely safe, as if he had been admitted into the church, until he can gain admission to the church." *4

This is an exceedingly unique and interesting example of sanctuary privilege forming a part of a municipal charter. It shows that in one English town at least, the right of sanctuary was much prized by the burgesses as being a right and privilege belonging to the people and not merely to the Church and under ecclesiastical control. Although this is the only case of the kind that has been met with, yet a similar privilege may possibly have existed in some of the other English towns.

When Henry VIII., in 1540, reformed the existing state of affairs in regard to sanctuary by limiting it to churches, hospitals, and churchyards, he raised up, at the same time,

³Gross, Gild Merchant, I, 30, 70, 74.

⁴ Memorials of St. Edmund's Abbey, R. S., vol. III, p. 315, sect. 38.

seven cities or towns as peculiar sanctuaries. These places were made cities of refuge or asylum to which persons guilty of minor offenses might flee and there abide the rest of their lives. The towns of Wells, Westminster, Northampton, Manchester, York, Derby, and Lanceston were the ones allowed to afford sanctuary privilege. Commissioners were appointed under the great seal of the realm to set forth the limits of these and other sanctuaries.⁵ Thus a class of secular sanctuary places was raised up which, in one case at least, soon roused complaint and opposition. The townsmen of Manchester, in 1542, sent up a petition against having sanctuary men resident in their midst. They complained that the cloth and cotton trade of the town had been much depressed and injured owing to the many depredations that had taken place since the resort thither of dissolute persons under sanction of the late act. Further, they said that they had no mayor, sheriff, nor bailiff in their town, that it was not walled, that it had no gaol or prison for the confinement of offenders and they therefore earnestly petitioned Parliament that they should be granted relief from the presence of sanctuary-seekers and that the sanctuary might be removed to some other town.6 This strong petition was acceded to by the Parliament in the same year, and an act was passed removing the sanctuary to Chester, which it was said had no trade such as that at Manchester, but possessed a good gaol and a mayor, bailiffs, and corporation.7 But Chester was no more content to be a sanctuary town than Manchester, and as the act had reserved to the king the power to change the sanctuary by proclamation, he acceded to the petition

⁵ Acts of 32 Henry VIII., c. 12; Mazzinghi, pp. 83-84.

⁶ Mazzinghi, Sanctuaries, p. 19, 84, where the reasons as stated are given.

⁷ Acts of 33 Henry VIII., c. 15. Chester is here called Westchester, Statutes of the Realm, III; Mazzinghi, 19-20.

of the mayor and corporation of Chester, which set forth that Chester, being a port town on the borders of Wales, was not at all a meet place for malefactors to resort to, and that a sanctuary there would bring much discomfort and inconvenience to the merchants and inhabitants of the town, and by proclamation changed the sanctuary from Chester to Stafford.8 The institution of these special places of perpetual sanctuary is a curious phase in the history of sanctuary in England. They did not, of course, last for any length of time, for, after considerable vacillation of legislation, their rights were taken away when sanctuary was completely abolished.

Reference has already been made to the presence of sanctuary crosses in certain parts of England, and in particular to the one at Armethwaite in Cumberland. Another such cross is to be found close to Land's End in Cornwall, about a mile from the ancient church of the town, at the corner of a road which leads down to certain ruins, known locally as "the sanctuary." This interesting cross, though generally regarded as Roman, is probably of Saxon or early Norman origin. It is of stone, each arm being two feet across, and the base three feet square and over a foot in height. Legends have gathered around this landmark, which bears on its face a human figure with arms extended in the shape of a cross, and the name of the Sanctuary Cross of St. Buryan has been given to it.9 Though the fact that such a cross as this provided refuge and sanctuary may well be doubted by the critical investigator, yet in Scotland there still exist the remains of a true sanctuary cross. This is the cross known as MacDuff's Cross. The story, perhaps legend, concerning it is an interesting one and has frequently attracted the notice of the his-

⁸ Mazzinghi, Sanctuaries, pp. 20, 42-43. Even at Stafford there were objections to the presence of the sanctuary.

⁹ Mazzinghi, Sanctuaries, p. 25.

torian and antiquarian.¹⁰ It is said that after the overthrow of the usurper, Macbeth, in the year 1057, and the coming of Malcolm Canmore, or Malcolm III., to the Scotch throne, MacDuff, the thane of Fife, who had been largely instrumental in overthrowing the usurper, asked that certain sanctuary privileges might be granted to his family. The king acceded to the request and by a royal grant it was declared that if any person related within nine degrees to the chief of the MacDuffs, killed a man without premeditation he should, on flying for protection to MacDuff's Cross, have his punishment remitted on payment of a fine. This famous cross stood near Lindores, in Fifeshire, and the pedestal still remains: the cross itself was destroyed by the Scotch Reformers in 1559. It seems probable that the privilege attaching to the cross has been exaggerated and that offenders of the MacDuff clan who fled thither were in reality only exempted from outside jurisdiction, but were responsible to the Court of the Earl of Fife. Thus the privilege would take on the nature of a grant of jurisdictional immunity to the earl. This view is borne out by a document, the original of which, bearing the date of 1291, is still in existence which certifies that a certain Alexander de Moravia claims the privilege as aforesaid. On the cross itself was a strange metrical inscription in Latin doggerel, the meaning of which, however, is very obscure and is much disputed.11

Amongst the peculiar survivals of sanctuary in England and Scotland was the protection afforded by the precincts of former religious buildings. Perhaps the best known English

¹⁰ See in particular Cunninghame, Essay upon MacDuff's Cross.

[&]quot;See Cunninghame, Essay upon MacDuff's Cross, and Sir Walter Scott, Minstrelsy of Scotch Border, note on MacDuff's Cross, and MacDuff's Cross, a dramatic sketch, with introduction, for a fuller description of this curious relic, and the legend connected with it. Scott refers to Lord Soule's "Law of Clan MacDuff," App., vol. IV, p. 206.

example is furnished by the district in London between Fleet street and the Thames near the Temple, known as Whitefriars or Alsatia. A convent of Carmelites, or White Friars, had been founded there in 1241 and had possessed certain privileges of sanctuary. Though after the Reformation the convent ceased to exist, and in 1580 the building was given over for the Whitefriars theater, yet privilege of sanctuary continued to be associated with the district. After 1616 the theater ceased to be used on account of the disreputable character of the neighborhood, and even after the Act of 1626, abolishing sanctuary privilege in England, the district continued to extend protection to criminals and to claim immunity from civil process. The pen of a great historical novelist has given us a graphic picture of the customs and life of Alsatia, 12 as it came to be called, being like the province of Alsace, or Alsatia, between France and Germany, a debatable ground. The libertines, the rogues, and the rascals, who frequented its purlieus and committed abuses and outrages on peaceable citizens, made it a notorious place of criminal resort.¹³ Bailiffs and officers of the law were afraid to enter its precincts to serve warrants or make executions. A serious riot originated there in the reign of Charles II., and so flagrant did the abuse become that, finally, in 1697, an act was passed which put an end to any immunity existing there, the Alsatians were dispersed and the district partially purified. At the same time the protection afforded by the Savoy, the Mint, and other places was likewise abolished.14 Thirty years later, by one last act, all

¹² Sir Walter Scott in the Fortunes of Nigel, and Peveril of the Peak. The name Alsatia first occurs in Shadwell's plays in Charles II.'s time, The Woman Captain (1680), and The Squire of Alastia (1688).

¹³ Mazzinghi Sanctuaries, p. 16, 21, 22.

¹⁴ Act of 8 and 9 Wm. III., ch. 27. An act "for preventing for the future, the many notorious and scandalous practices used in many pretended privileged places in and about the cities of London and Westminster,

vestiges of such sanctuary protection were done away with completely and the law could at last take its course freely within the city.¹⁵

In Scotland all sanctuaries were abolished at the time of the Reformation, but the privileges attaching to the ancient Abbey of Holyrood, in Edinburgh, continued after that date, and the precincts of Holyrood palace were recognized as affording sanctuary for debt. No criminals could, however, find refuge there, nor were crown debtors or fraudulent bankrupts allowed protection, and a warrant charging meditato fugae, or premeditated flight, could be executed within the sanctuary. Nevertheless, the resort of unfortunate debtors to Holyrood was very frequent. The boundaries or limits of the sanctuary embraced the whole of King's Park, surrounding the Palace, and the debtors found lodgings in part of a small street within the privileged limits. After being in sanctuary for twentyfour hours the fugitive debtor had to enter his name in the record of the Abbey Court in a register kept for the purpose. Unless he was so registered he was not entitled to more than one day's protection, but after registering he was safe from prosecution. By an Act passed in 1696 any insolvent who fled to sanctuary thereby constituted himself a notour, or legal bankrupt.16 This curious privilege, a relic of sanctuary times, which was extended to debtors, was the last of such a nature in existence

and the borough of Southwark, county of Surrey, by obstructing the execution of legal process therein, and thereby defrauding and cheating great numbers of people of their honest and just debts." By this it was enacted that any creditor might issue legal process against any debtor although resident within the Minories, Salisbury Court, Whitefriars, Fulwood's Rents, Mitre Court, Baldwin's Gardens, The Savoy, Clink, Deadman's Place, Montague Close, or the Mint. See Mazzinghi, p. 16.

¹⁵ Stephen, *History of the Criminal Law in England*, ch. xiii, summarizes the abuses put an end to.

¹⁶ Bell, Commentaries on Scottish Law, vol. II, pp. 461 ff.

in the British Isles. It continued to exist far into the nineteenth century being only abolished in 1880, when imprisonment for debt was done away with, and such protection to the person of the debtor rendered unnecessary. Thus it is only within the last twenty-five years that sanctuary-seekers have ceased to exist in the United Kingdom.

CHAPTER VII

SUMMARY AND CONCLUSION

The history and progress of the right of sanctuary as it existed in England have now been treated as fully as the scope and purpose of this essay allow. We have seen the right of asylum in its origin amongst the Hebrews and the nations of the ancient world, a right grounded in their worship and religion. We have seen it later taken up by the Christian Church and Christian nations of Europe. Then its rise and development in England have been traced until it became the right or privilege of sanctuary with which abjuration of the realm was connected. The customs, the usages, the abuses, and the evils appertaining to sanctuary have been fully dealt with, and it only remains to say a few words in general in regard to sanctuary protection.

The whole basis of sanctuary privilege and protection in England was the power of the Church to assert its inviolability of privilege and the willingness of the State to recognize this claim and to respect ecclesiastical immunities. Without such assertion of their right or without such recognition by the State, there could not have been any secure sanctuary afforded to fugitives, no refuge for those seeking protection from powerful adversaries. It must never be forgotten that in the Middle Ages the Church was the great factor in civilization, the great protectress of the injured, oppressed, and unfortunate. It was the ecclesiastical influence that in the Dark Ages raised up such institutions of Christianity and light as the Truce of God and the Peace of God—the Treuga Dei and the Pax Dei. Another such institution,

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at its best, was the right of sanctuary. The Church in those days had such a hold on men's minds, and the age was one of such superstition and fear of Divine vengeance, that the curse of a priest was more dreadful than a foeman's steel, the possible vengeance of an angry God more terrible than the wrath of man. Thus when the Church said that those who sought her protection must be treated with leniency and mercy, and their lives and persons spared, no State nor individual was strong enough or bold enough to refuse to comply. The right of sanctuary, therefore, in its developed form, was a typically mediaeval institution designed to meet the needs of the time and fit in with the existing laws and customs of the day.

That the privilege possessed by Christian churches was at one time beneficial and useful, no one can deny. When the law in the land was weak, when unlimited, barbarous, and merciless vengeance might be taken for small offenses, the shelter of a church often proved the salvation of unfortunate wrongdoers. No one should ever speak with contempt of the ecclesiastical institutions of the Middle Ages for most of these institutions were blessings in their time and age and suited to the needs of a less civilized community than ours. When bands of robbers, lawless marauders, and lordless men overran the land, when rough and ready revenge (we can hardly call it justice) was the rule not the exception, was it not well, indeed, that helpless peasants, unfortunate homicides, or defenseless women, not to speak of travelers, vanquished foes, and others in need of protection, could take refuge at some holy shrine or altar and be safe from molestation. Was it not also a blessing that uncivilized and inhuman as men's minds were in those days, they should yet be filled with what may, perhaps, be now considered as an irrational awe of the religious and supernatural? an awe, however, which prevented the invasion of sacred places and checked cruelty and

licentiousness. There is little doubt but that the influence and example of the Church greatly helped to inculcate more merciful and humane ideas in men's minds. Thus, in the Middle Ages, the right of sanctuary had in it much of good, much to commend it to the student of civilization. Especially was the privilege of sanctuary commendable in cases where the guilt of the sanctuary-seeker was doubtful. Many innocent persons were thus saved from unjust punishment, even from death. In other cases, when the guilt of the fugitive was beyond doubt, the sanctuary accorded him, if wrong, yet erred on the side of mercy, and the protection ameliorated the severity of the law.

But though in ages of defective legislation and low civilization sanctuaries were a blessing to the community, such was not the case when their priviliges began to be abused and taken advantage of by unworthy seekers after shelter and protection. Even though in such cases the sanctuary might err on the side of mercy, yet such error was costly to the civilized community, in that wrongdoing was protected and the proper maintenance of peace, order, and justice interfered with. The need or place for such an institution as that of sanctuary passed away as soon as the class of unfortunate or oppressed, for whom it had at first been designed, were assured by the law of a fair and equal trial or proper protection and safety.

The abolition of sanctuary privileges in England, moreover, did not, as some persons seem to imagine it did, make criminals liable to punishment that before had been avoided altogether. The oath of abjuration was in itself a punishment and disgrace, as it entailed outlawry and banishment as well as forfeiture and escheat of goods and lands. If criminals did not abjure after forty days of grace, they were forced to stand trial as ordinary offenders. It was only in a few specially privileged places that criminals could abide for any length of time, and dwelling in scactuary was the same in many ways as confinement in a gaol. Thus the doing away of sanctuary and abjuration, while ending an effete and abused mediaeval institution, did not really subject those who had been used to claim its privileges to any unjust or excessive penalties. The law dealt justly with the unfortunate in most cases, and in the case of the fraudulent and the habitually criminal sanctuary-seekers it was a blessing that they were at last brought under the strong and direct arm of the law.

In Europe, generally, the right of asylum existed under restrictions down to the end of the eighteenth century. In Germany, the perpetrators of certain of the more serious crimes were always excepted. Highwaymen, robbers, state conspirators, and habitual criminals could not receive church protection, and the institution was modified further by a bull of Martin V., in 1418, and by another in 1504 issued by Julius II. In a somewhat restricted form the German Asylrecht lingered on into modern times and was not finally abolished until the last quarter of the eighteenth century. In France the droit d'asile existed throughout the Middle Ages, but in 1539 was greatly limited and modified by an edict of Francis I.: the Ordonnance sur le faut de la justice. 1 During the constitutional and institutional changes of the period of the French Revolution, the right of asylum was totally abolished and done away with.

The broader side of the right of asylum, as regards fugitives who sought, and frequently still seek, a refuge and sanctuary in foreign countries or in inaccessible regions, has not been touched on by the writer of the present essay. The relation between the right of asylum in churches and sacred

¹ The history of the right of asylum in Europe is treated in two scholarly works, one by Bulmerincq, *Das Asylrecht*, Dorpat, 1853, and the other by Wallon, *Droit d'asile*, Paris, 1837.

edifices to the practice of criminals, defaulters, political refugees, and others taking sanctuary in foreign states has been dealt with by other writers, in one instance in connection with extradition of fugitives, in another in regard to the duty of a country's protecting those relying on her aid.² The object of the present writer has rather been to give a concise and logical account of the English form of church asylum known as right of sanctuary, with its attendant forms, usages, and customs, and the place it held in the national life of the country during the centuries in which the institution existed. Enough has been said to show the prevalence of sanctuary-seeking, the essentially English character of the procedure in connection with sanctuary and abjuration, and the causes of the decline and abolition of the institution.

In England the institution of sanctuary had three distinct stages, first of growth, then of development, and lastly of decay. The Anglo-Saxon period was the one which saw its definite erigin in England and its growth into a national institution; the centuries succeeding the Norman conquest saw its development throughout the length and breadth of the land and its greatest prosperity; but with prosperity came abuse, familiarity bred contempt, and the Tudor and Stuart periods witnessed, first, an attempt at reform and limitation, when many of the existing sanctuaries were done away with, then, when the Reformation had done its work, the almost total abolition of sanctuary, abjuration, and all their attendant evils and abuses. The one great conclusion we must reach is that in England the right of sanctuary ran its full course and from being a necessity. and perhaps a blessing, became a burden and an abuse, even a curse to the State, so that its final abolition was a measure calculated to advance the interests of justice and morality in the land.

²Bulmerincq, Das Asylrecht, and Mazzinghi, Sanctuaries, are the writers referred to. See, also, however, Wallon, Droit d'asile.

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